

Draft Document

The Indiana State Trails, Greenways and Bikeways Plan



Draft Document

Final Draft
July, 2006

Draft Document

Draft Document

Draft Document

Draft Document

Hoosiers on the Move

The Indiana State Trails, Greenways and Bikeways Plan

Draft Document

Prepared by

Indiana Department of Natural Resources
Division of Outdoor Recreation
402 West Washington St. Rm 271
Indianapolis, Indiana 46204-2785

In partnership with

Indiana Department of Transportation
100 N. Senate Avenue
IGCN, Rm. N700
Indianapolis, IN 46204

Draft Document

July, 2006

Draft Document

Draft Document

Draft Document

Honorable Mitch Daniels, Governor
Kyle Hupfer, Director, Indiana Department of Natural Resources
Thomas Sharp, Commissioner, Indiana Department of Transportation
John Davis, Deputy Director, Bureau of Managed Lands
Emily Kress, Director, IDNR, Division of Outdoor Recreation
Ray R. Irvin, INDOT Director of Greenways and Bikeways

Draft Document

Trails Plan Steering Committee

John Alexander	Indiana Chapter - International Right of Way Association
Phil Anderson	Indiana Rural Development Council/Office of Rural Affairs
Susanna Arvin	Indiana Department of Natural Resources
Mitch Barloga	Northwest Indiana Regional Plan Commission
Brian Blackford	Office of Tourism
Karen Bohn	Indiana Trails Advisory Board - trail support groups
Valla Ann Bolovschak	Ohio River Greenway Commission
Rhonda Border-Boose	Rails-to-Trails Conservancy
Bob Bronson	Indiana Department of Natural Resources
Brad Buening	Indiana Farm Bureau
Lynn Dennis	The Nature Conservancy - Indiana Chapter
Dax Denton	Association of Indiana Counties
Ric Edwards	Indiana Department of Natural Resources
Lenette Freeman	Cardinal Greenway
Pete Fritz	Indiana Bicycle Coalition
Vince Griffin	Indiana Chamber of Commerce
Amy Inman	Indianapolis Metropolitan Planning Organization
Shirley James	Pigeon Creek Greenways Passage
Andrea Johnson	Indiana Association of Cities & Towns
Matt Klein	Indiana Greenways Foundation
David Lips	Indiana Economic Development Corporation
Mike Martin	Indiana Department of Natural Resources
Pat Martin	Bloomington Area Transportation System
Greg Midgley	National Road Heritage Trail
Marta Moody	Delaware-Muncie Metropolitan Plan Commission
Steve Morris	Indiana Department of Natural Resources
Eric Neuberger	Governor's Council for Physical Fitness & Sports
Joyce Newland	Federal Highway Administration
Jamie Palmer	IU SPEA/Indiana Planning Association
Dawn Ritchie	City of Ft. Wayne
Rory Robinson	National Park Service - RTCA
Jeff Roeder	Indiana Department of Natural Resources
Yvette Rollins	Indiana Trail Riders Association/Indiana Horse Council
Steve Slauson	Indiana Park & Recreation Association
Megan Tretter	Governor's Office
Diana Virgil	B&O Trail Association
Richard Vonnegut	Hoosier Rails to Trails Council
Mick Wilz	Whitewater Canal Trail

Draft Document

Draft Document

Draft Document

Draft Document

Draft Document

Draft Document

Draft Document

Draft Document

Draft Document

INTRODUCTION

Indiana's Trail, Greenways and Bikeways Plan

The Indiana Department of Natural Resources in cooperation with the Indiana Department of Transportation, the Governor's Council for Physical Fitness & Sports and the Indiana Economic Development Corporation is producing this trails plan to guide the development and expansion of a statewide system of trails to be used for recreation and transportation throughout Indiana. This plan takes into consideration that all types of trail-related activities are gaining popularity for their mental, physical and spiritual health benefits. It also takes into consideration that people value trails for a variety of reasons. To accommodate this diverse and increasing demand, Indiana's plan sets forth a goal of providing an easily accessible trail opportunity within 15 minutes or 7.5 miles of all Indiana residents.

The plan's coordinated and strategic approach for creating a system of trails in Indiana is intended to motivate all levels of government, private trail groups and organizations into action. The plan envisions linking public lands, natural and scenic areas, tourist destinations and communities with a multi-modal trail system. The plan emphasizes major statewide and regional trails and works to incorporate local linkages into the statewide network.

All trails that are planned and developed in Indiana are considered to be part of the statewide trail vision. These include projects that local governments and private trails groups and organizations are undertaking to develop local trail systems to provide "close to home" recreation and alternative transportation opportunities. To that end, this plan will serve as a guide for allocating resources from such programs as the Federal Recreational Trails Program (RTP), the Transportation Enhancement (TE) Fund and other financial assistance programs that can be used for trail acquisition and development.

Draft Document

Draft Document

Draft Document

Purpose

Indiana's trails and greenways plan has been created to function as a tool for improving existing trails and developing future trails through sound planning and design. This plan identifies issues impacting trails on a statewide scale and recommends strategies for addressing these issues. The plan also serves as a comprehensive source of information on recreational trail participation in Indiana. An evolving inventory of major statewide, regional and community trail system resources is included to form the basis for an interconnected statewide network of trails. This plan is intent on stimulating and supporting coordinated approaches to creating and enhancing this network. It will serve as a resource for trail planners, builders, managers and advocates.

Public participation was critical in developing the Indiana Trails Plan. Public comment was solicited through surveys, meetings with the general public and trails interest groups. Development of the document was guided by a steering committee made up of federal, state and local officials, members of trails groups, private trail funding entities and the general public. It is intended to be a dynamic document, changing over time as new trails are developed and additional opportunities become available.

Draft Document

Draft Document

Draft Document

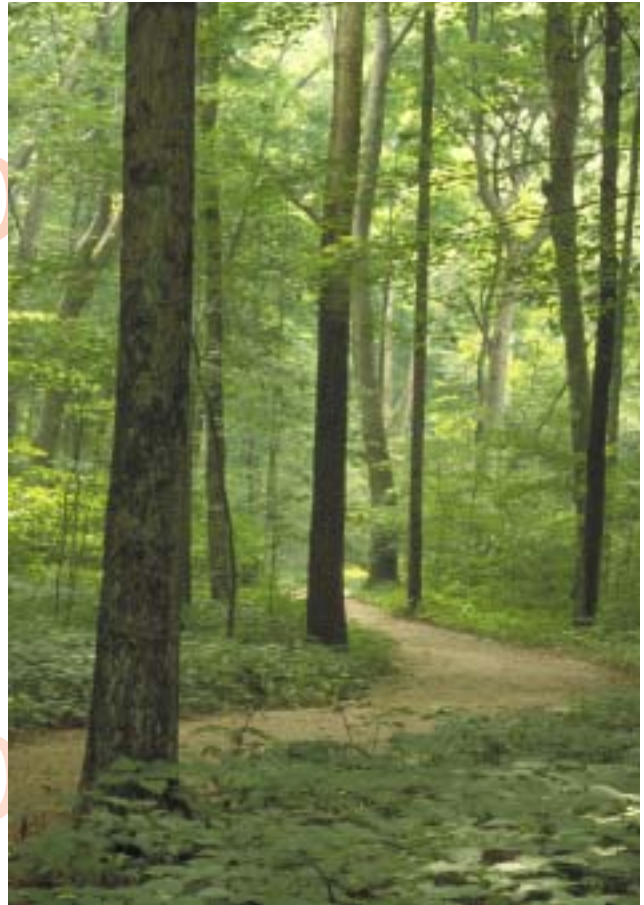
Trails in Hoosier Society

What is a trail? The American Heritage Dictionary broadly defines it as anything from an ancient foot path to a shipping route. This definition includes, but is not limited to, bikeways, rail routes and motor roads. Consequently, the meaning of the word “trail” is, and always has been, passionately debated. Every group of users has its own vision of what a trail should be as well as who it should cater to and provide for. A final definition of “trail” may never be agreed upon, but two things are certain: Trails have a storied history and are inherently dependent on those who use them. For this purpose, a trail shall be a corridor on land or through water that provides recreational, aesthetic, alternate transportation or educational opportunities to both motorized and non-motorized users of all ages and abilities.

In a subsistence economy, trails were primarily used for hunting or gathering food. As technology changed lifestyles, people began using and creating trails for a variety of other uses. Many trails evolved from utilitarian to leisure. Today, trails provide recreation, education, interaction with the environment, community improvement, social networking opportunities, economic development, physical and mental health benefits and much more. All of these uses bring value and benefits to individuals and society as a whole.

Hoosier history is replete with trails from our earliest natives to current users. For example, the native Sauk trail, which connected the area south of Chicago to the Detroit area by passing around the Kankakee swamp and across Northern Indiana, was for economic exchange. Trails linking one mounds village to another, Evansville to Anderson for example, were for commerce. Long-distance water routes such as the Oubache (Wabash) River and Ohio River were used for both economic and cultural exchange. Recreational trail use was restricted to village areas.

Whether by the French, English or others, trails were also used for exploration, economics, military control and conquest. They frequently played a major role in colonization and politics. Valuable cultural trails, such as the route of the Lewis and Clark Expedition, the trails of the Underground



Railroad and the Trail of Tears still exist today as historical reminders and cultural resources. Long distance water routes such as the Ouabache (Wabash) and Ohio Rivers were used for commerce and conquest.

Indiana has other trails that were for moving people, creating communities and sending out food. One valuable federal route, still in use, is called the National Road, another is the Michigan Road. There were numerous connections, like the route from Evansville to Vincennes, from the Ohio River northward to small towns using stage coaches and other secondary routes. Many of these trails are lost to the past such as the Wetzel Trace. Critical to the State's development, the trace was the first road that brought the first settlers into the Indiana wilderness.

Adapted from an essay by Richard Vonnegut
Vice Chair, Hoosier Rails to Trails Council



Later came packet boats on canals throughout much of Indiana. The creation and collapse of canals as a money-making venture had a profound effect on Indiana state government. Even today, hints of public skepticism about state spending and government debt can be traced to the failure of the canal system.

Many of these land and water routes were the foundation for steam railroads, electric railroads and macadam roadways during the mid 1800's through the mid 1900's. The corridors of electric inter-urban railroads and paved roads enabled families and individuals to commute or send farm products longer distances in a shorter time. This allowed for a regional trade network to develop. In addition to products, tourism evolved as people could now travel to big cities to sightsee, shop and relax on the weekends. Indeed, trails technology allowed people to experience life beyond subsistence, hence the beginnings of recreation. An example of early recreation, around the year 1880, is adults and families bicycling the Central Canal towpath from downtown Indianapolis to Riverside to rent rowboats.

One marketing value derived from the number of rail lines passing through Indianapolis, and thus Indiana, is the moniker "Crossroads of America," although now that image is perceived only with respect to highways.

Slowly, roads and automobiles replaced the railroads. The new sensibility was "What's good for the car is good for the country." Unused rail lines were removed and eventually converted, in many cases, to greenways and trails for walking and biking. An increase in walking and bicycling spurred the development of bikeways. This included bikeways on streets designated by signs as well as continuous lanes marked by block-long stripes. Bike lanes located away from the immediate motor surface also increased in number.

Vacant corridors have latent value for communities as utility right-of-ways and as potential bike trails. Indeed, where pipes and cables are buried or wires are strung overhead, the service road serves two purposes. In Indianapolis, for example, before the Monon Trail was paved from Broad Ripple to Fall Creek, a forced-main sewer was laid that saved

the city tens of thousands of dollars of the usual street repaving costs. The Calumet Greenway, a major link of trails around Lake Michigan, is another example of a dual use corridor. It also serves as the service road for overhead power lines, active rail corridors and utility resources.

Trails, particularly when planned with community development in mind, bring economic value to an area. Generally, economic improvement is a result of a combination of four factors: 1) Trails create a new clientele for area businesses. Upon the opening of the Monon Trail in Broad Ripple, an adjacent restaurant, Plump's Last Shot, saw a very large, and unexpected, increase in day and summer evening dining business. 2) Business relocation: The new owners of Valley Bikes moved the store from Crawfordsville to Carmel to be on the Monon Trail. This business has shown strong success since. 3) New employment opportunities: Whether it is short weekend work for youth or full-time jobs for adults, more retail stores mean more opportunities for employment. 4) Trail investment in real estate:

This might involve a trail reclaiming and repairing an unused structure (e.g. the rehab of the Wysor Depot in Muncie as the headquarters of the Cardinal Greenway) or reopening a long-vacant building for a retail shop. An example being the Revard Brothers opening a third Bike Line store in a vacant building at the south end of the Monon Trail in downtown Indianapolis.

On a large scale, real estate development might be the building of condos, houses and/or strip malls adjoining a trail. Better yet, create a whole new town with multiple housing units, shops and community areas built around sidewalks, and trails

and trail amenities with consideration given to the culture of non-motor transport and recreation. Any of these economic scenarios may occur in any proportion at any time. The more scenarios, however, the more economic value to a community.

Trails also add historical value to a community. Participation and learning can come through reading tableaux of local history. One of the best national examples of incorporating history into a trail is the Oil Creek Trail in Pennsylvania. It boasts 10 miles of interpretive drawings and text tableaux of the history of oil development from the waning days of whale oil to the recent decades of petroleum as fuel.



The Prairie Duneland Trail at Portage has several interpretive tableaux about various topics (history, plants, animals, etc.) related to that trail. The Whitewater Trail offers hand maps and a large display board with descriptions of points of history along that trail. The People's Pathway in Greencastle offers a gazebo with a map of

the proposed trails system. The historic Delphi canal and trails system offers a community trail and map system complete with an interpretive center and a watered canal section that will soon have a packet boat.

In addition to education, trails also have the potential for positive social impact. Trails improve communities by encouraging informal social walks and gatherings among friends. Notably, these social walkers and other users often create neighborhood "crime watch" security, as has occurred on the Monon Trail south of the fairgrounds. Trails also help create a

comprehensive sense of community as shown by Memorial Hospital in Logansport where local health businesses can pay to build a trail, thus channeling costs away from park budgets. Greenways also improve the community's natural environment by encouraging habitat for wildlife and native plants as well as the growth of trees, nature's best air cleaners, which still beat mechanical air purifiers.

Trails may originate from many former uses, be they rail trails, river levy systems (Evansville, Indianapolis, Ft. Wayne), canal towpaths (Delphi, Indianapolis), old roads, treaty lines, scenic highways, farm perimeters/field edges (National Road Trail in Vigo County) or cross country routes. Trails may be finished with concrete (the 1902 Northern Indianapolis Electric Railroad), asphalt (the Erie Lackawanna in Lake County), a boardwalk (Anderson's Indian Rail Trail Riverwalk), a new, hard (epoxy type) surface or a softer crushed limestone. Trails may also offer a rustic surface of dirt, grass (part of Bloomington's Clear Creek Trail), railroad ballast (the NKP), wood mulch (Marmont Vandalia Trail at Culver) or other material. And though their surfaces may differ, they have one important thing in common. Trails are good for their users, their communities and the vast array of environments they pass through.

As you read the Indiana State Trails Plan, be mindful of the history, the importance to Indiana, the value, and the meaning of trails to countless Hoosiers. They are your trails. Welcome and enjoy.

Draft Document

Chapter 1 A Trail Vision for Indiana

The Indiana Trails Vision

To build a statewide trail, greenway and bikeway system that provides access to a trail opportunity within 15 minutes of all Indiana citizens.



The Indiana State Trails Plan Goal and Objectives

The Indiana State Trails Plan goal and objectives' propose to fulfill Indiana's trails vision through:

Partnering federal, state and local governments with trail use groups and organizations, businesses, private funding entities, community groups and citizens to connect communities through a state wide multi-model network of greenways and trail system.

Encouraging public and private sectors to develop combined trail and infrastructure opportunities that will support the development of Indiana communities with utility and recreational needs for the 21st century.

Educating the public and private sectors about the benefits a statewide greenways and bikeway system will bring in terms of health, fitness, tourism, infrastructure and economic advantages to their communities.

Highlighting links to neighboring state, local and regional trails systems and places of interest.

Endorsing the use of greenways and bikeways as an economic growth asset to the State of Indiana, its communities and its citizens.

Creating a healthier and more livable state for the benefit of all citizens.

Indiana Trails Goal, Objectives, Strategies and Actions

Based on the information presented in the remainder of this document, the following goal, objectives and actions have been set for providing trails in Indiana. It is important to note that this plan provides opportunities at the state government, local government and the grass roots level to participate in reaching the goal. Providing for the need of trails users in Indiana will require partnerships and teamwork among all three levels. The goal is ambitious. By working together, it can be accomplished.

Indiana Trails Goal:

A trail within 15 minutes of every Hoosier by 2016.

The Indiana trails goal will be measured in terms of a trail within 7.5 miles of every Hoosier.

Objective #1:

Partner Federal, State, Local, Not-for-profit and private resources to build a statewide network of trails

Objective #2:

Support non-state entities that acquire, develop and manage trails

These objectives can be met through implementing the following strategies. Federal, state, local and not-governmental agencies working together can utilize these strategies to address trails related issues pertinent to their situation. Taking coordinated action at multiple levels will create a statewide environment where the statewide trails network can grow and become an integral part of the lives of Indiana's citizens and will reflect directly on the state's economy as a whole.



Strategy #1:

Improve coordination of trail development, planning and design at local, state and federal levels

Strategy # 2:

Increase trail funding to provide trails to meet present and future demand.

Action 1:

Encourage interested and impacted representatives including landowners, not-for-profits, businesses, public transit, and governmental entities to get involved in all phases of developing new trails

Action 1:

Initiate and increase state funding mechanisms to augment annual operating budgets and capital expenditures for acquiring and developing trails

Action 2:

Secure the participation of representatives in the health and wellness profession, and related businesses such as insurance and pharmaceutical industries

Action 2:

Encourage local initiatives for trail funding

Action 3:

Ensure that trails are included in road right-of-ways, road abandonment and bridge development and expansion projects

Action 3:

Encourage and provide incentives for private funding for trails from such entities as foundations and corporations

Action 4:

Include engineers, architects and planners during all phases of trail development to ensure natural resource preservation and ADA compliance

Action 4:

Include funding for long-term trail maintenance in operational budgets

Action 5:

Encourage and support not-for-profits to acquire and develop trails

Action 5:

Foster a working statewide support network composed of agencies, legislators, planners/designers, organizations, managers and citizens interested in trail development

Action 6:

Encourage and support public and private partnerships that acquire and develop sustainable trails and bikeways



Strategy #3:

Acquire more land for trails

Strategy #4:

Collect and distribute information on trails

Action 1:

Identify and extend opportunities for intra- and inter-state trail connections

Action 2:

Increase the number of miles of trails in Indiana

Action 3:

Improve the acquisition process of former railroad corridors for trail development

Action 4:

Advocate that trails be included in land use planning, including re-negotiation of road right-of-ways and bridge developments

Action 5:

Advocate that developers be required to set aside land for trails

Action 6:

Expand the number of areas available for the legal use of ATV's, motorcycles, off-road bicycles and off-highway vehicles

**Action 1:**

Encourage and support research on Indiana trails and trail related issues

Action 2:

Inform the public about the health, economic and social benefits of trail use

Action 3:

Develop and distribute educational materials about trail use and environmental ethics/etiquette

Action 4:

Distribute information on trails via the internet and other media

Action 5:

Install signs that interpret natural, historical and cultural features of trails

Action 6:

Install multilingual signs where appropriate

Action 7:

Encourage the development of design guidelines that use standardized signs and symbols to designate trail activities and facilitate trail navigation statewide

Action 8:

Include health education information on trail maps and guides

A State Visionary Trails Network

A statewide trails vision map was created based on extensive inventory, analysis, coordination with local governments and regional planning entities and public input. This map intends to highlight corridors that could serve as a statewide trail backbone network that can connect to concurrent and subsequent trails planning efforts. The map delineates corridors of national, state or regional importance that connect communities to each other and natural and cultural resources. The actual placement of trails within these corridors, and the inclusion of other corridors in the statewide trails system will be determined as specific trail projects are proposed and completed based on more detailed planning efforts.

Criteria Used to Establish Proposed Visionary Trails System

The following criteria were used to identify trails to be included on the list of trails of statewide significance. Trails of statewide significance are those trails that offer the highest potential to accommodate multiple connections to destinations and communities. Not all trails in Indiana were considered. Trails that are loop trails or those located solely on a single property such as those found only on state parks or forests were not considered. The designated use of a trail was not a consideration.

In order for a trail to be placed on the list it must have satisfied both of the following criteria.

1. Proposed trail corridor crosses two or more counties – all
2. Proposed corridor contains trail segments completed, under development or formally planned – many others

The following lists of trails describe how each trail included in the list of statewide significant trails was classified in terms of each individual trail's planning and or development stages.

Formally designated or being developed as trail corridor

- American Discovery Trail
- Monon Trail in Marion and Hamilton Counties
- Cardinal Greenway from Richmond to Marion
- Nickel Plate Trail in Howard, Miami and Fulton Counties
- Knobstone Trail in Clark, Scott and Washington Counties

Focus of study or plan for trail corridor

- National Road Heritage Trail from Terre Haute to Richmond
- Marquette Greenway in northern Lake, Porter and Laporte Counties
- I69 corridor from Indianapolis to Evansville

Formal organization devoted to development of trail corridor

- B&O Trail in Marion, Hendricks, Putnam and Parke Counties
- Knobstone Trail extension to Morgan County
- Panhandle Pathway from Winamac to Logansport
- Wilbur Wright Trail connecting New Castle with the Cardinal Greenway

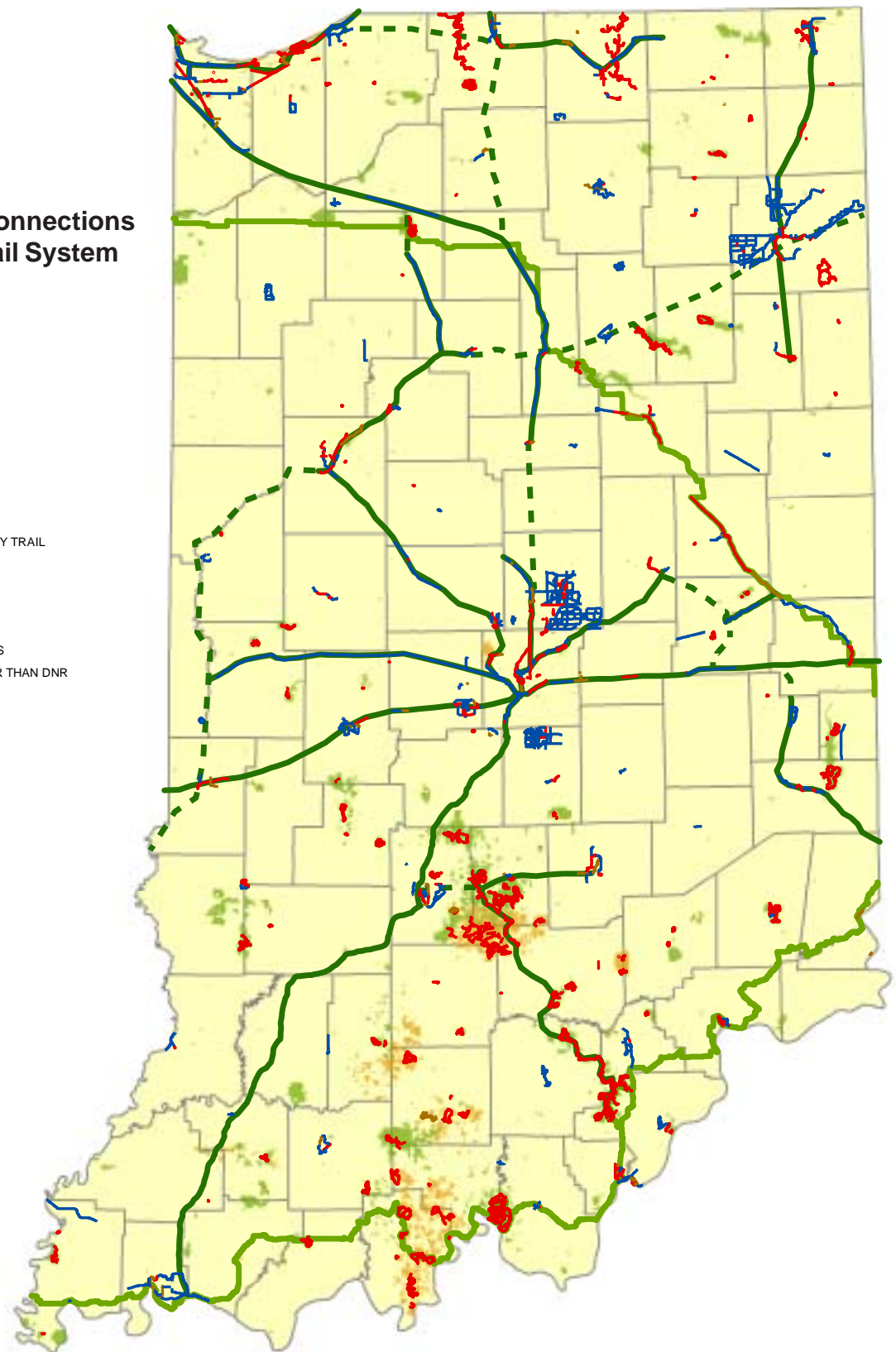
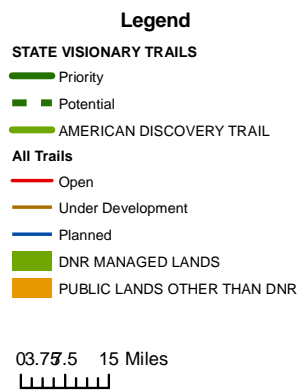
Considerable level of discussion as proposed trail corridor

- Farm Heritage Trail in Boone and Tippecanoe Counties
- Old Interurban Trail from Ft. Benjamin Harrison to Anderson
- Whitewater Canal Trail in Fayette and Franklin Counties
- SR46 Trail in Bartholomew and Brown Counties
- Wabash Heritage Trail from Lafayette to Logansport
- Pumpkinvine/St. Joseph River Corridor in St. Joseph, Elkhart and LaGrange Counties
- Upstate Indiana Trail in Wells, Allen, DeKalb and Steuben Counties

As a result of public participation and public comment received during development of the state trails plan, other potential visionary trails were identified

- South Shore/NIPSCO corridor from Michigan City to South Bend
- US31 corridor from South Bend to Rochester
- US35 corridor from Winamac to Bass Lake
- Wabash River/US24/Maumee River corridor from Logansport to Ohio State Line
- US31/SR19 corridor from Kokomo to Westfield/Noblesville
- Wabash River/West Central Indiana corridor connector from Vigo County to Tippecanoe County
- State Road 1 corridor from the National Road Heritage Trail to Connersville
- SR46 corridor from Bloomington to Nashville
- Honey Creek Corridor between Anderson and New Castle
- State Road 3 Corridor between New Castle and the National Road Heritage Trail

Making the Connections Indiana's Trail System



A vision of the Indiana State Trails System (July, 2006)

Measuring Progress on Indiana's Trail System

Current Status

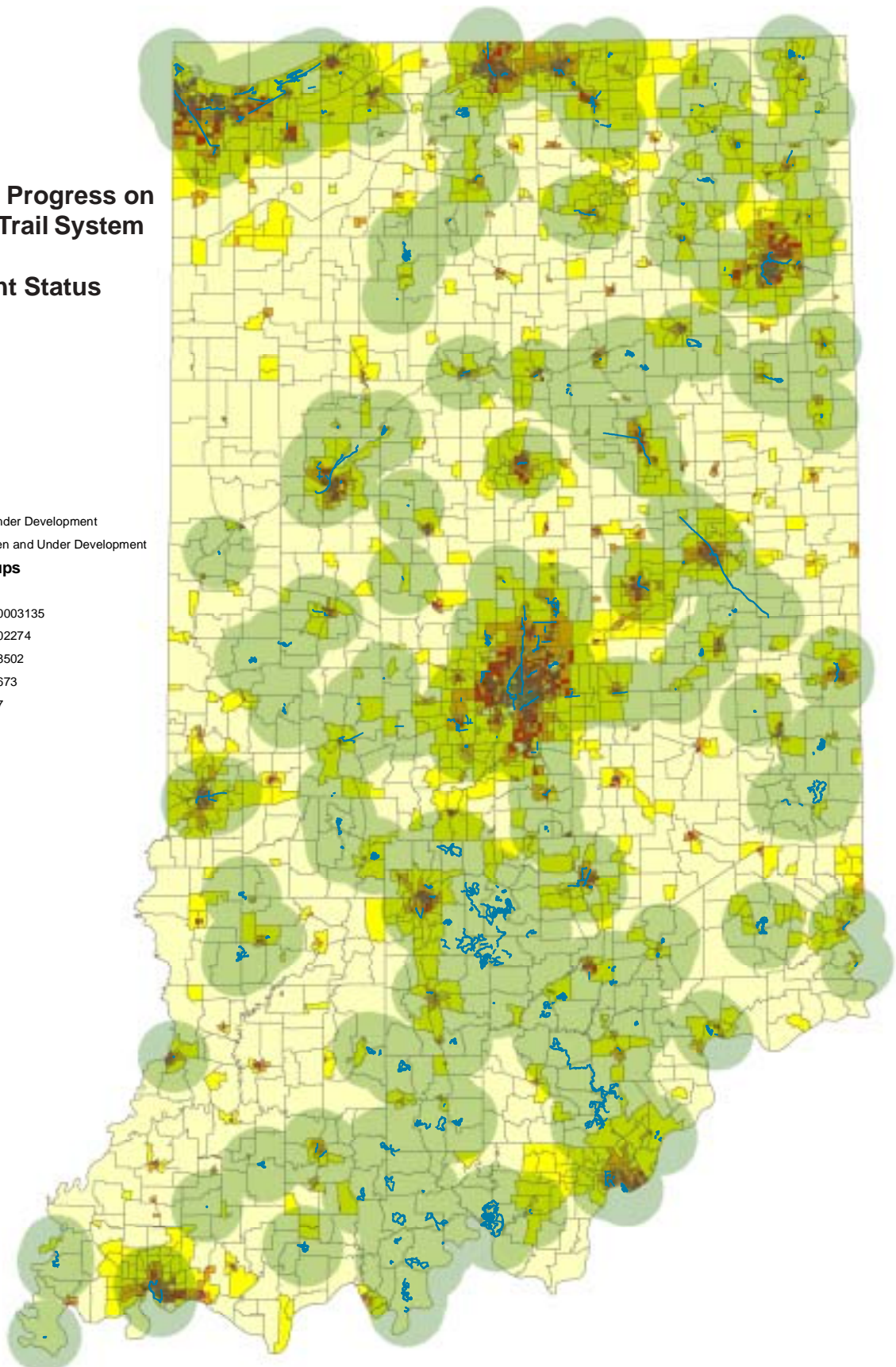
Legend

- Trails Open and Under Development
- Buffer of Trails Open and Under Development

Census Block Groups

People/SqMeter

- 0.000000000 - 0.00003135
- 0.00003136 - 0.0002274
- 0.0002275 - 0.0008502
- 0.0008503 - 0.001673
- 0.001674 - 0.03287



Population within 7.5 miles of a trail currently developed

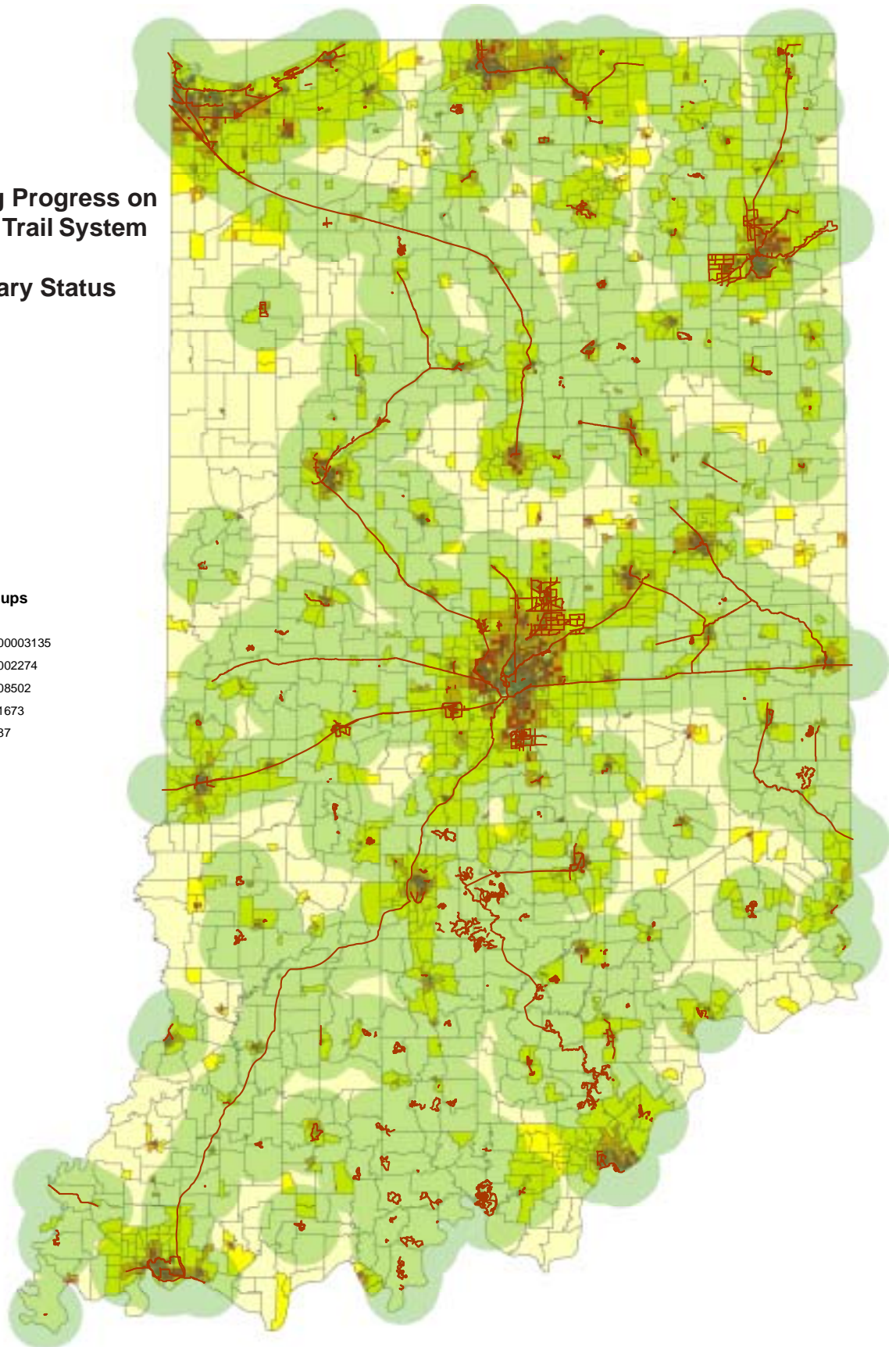
Measuring Progress on Indiana's Trail System

Visionary Status

Legend

Census Block Groups People/SqMeter

	0.000000000 - 0.00003135
	0.00003136 - 0.0002274
	0.0002275 - 0.0008502
	0.0008503 - 0.001673
	0.001674 - 0.03287



Population within 7.5 miles of a trail developed, planned and visionary

Developing the Plan

The Indiana trails plan was developed by the Indiana Department of Natural Resources, Division of Outdoor Recreation and the Indiana Department of Transportation. A Trails Plan Steering Committee was convened to provide input and guidance as the plan was being developed. The steering committee consisted of DNR Staff and members of various agencies and associations involved in trails and trails related issues throughout Indiana. The Steering committee met periodically to review the document, maps and issues, and to plan for involving the public during the process. The following groups were represented on the steering committee.

- Governor's Office
- Indiana Department of Natural Resources
- Indiana Department of Transportation
- Indiana Economic Development Corporation
- Governor's Council for Physical Fitness & Sports
- Indiana Office of Tourism
- The Federal Highway Administration
- National Park Service – Rivers Trails and Conservation Assistance Program
- Indiana Park & Recreation Association
- Bloomington Area Transportation System
- Indiana Trails Advisory Board
- Hoosier Rails to Trails Council
- Indiana Greenways Foundation
- Rails-to-Trails Conservancy
- Indianapolis Metropolitan Planning Organization
- Northwest Indiana Regional Plan Commission
- Delaware-Muncie Metropolitan Plan Commission
- Indiana Bicycle Coalition
- IU SPEA/Indiana Planning Association
- Indiana Association of Cities & Towns
- Association of Indiana Counties
- Indiana Farm Bureau
- Pigeon Creek Greenways Passage
- Ohio River Greenway Commission
- National Road Heritage Trail
- Cardinal Greenways
- Whitewater Canal Trail
- B&O Trail Association



- City of Ft. Wayne
- Indiana Chamber of Commerce
- Indiana Trail Riders Association/Indiana Horse Council
- The Nature Conservancy - Indiana Chapter
- Indiana Chapter - International Right of Way Association
- Indiana Rural Development Council/Office of Rural Affairs



The Plan Steering Committee assisted the Governor's Office, the Indiana Department of Natural Resources and the Indiana Department of Transportation in hosting a Trails Plan Summit in May of 2006. Networking, information exchange and public input were the focal point of the summit. Attendees from around Indiana took part in completing the visionary trails map utilizing the real time mapping. The attendees also participated in charrette style

discussions of trails issues that are prevalent through out the state. In small groups, they discussed the issues and brain stormed recommendations and solutions that were included in the plan where applicable. At the end of the day, the attendees presented their findings to the governor.

Chapter 2 What is a Trail?

Trails and greenways have grown in popularity and acceptance since the development of the first Indiana Trails Plan in 1996. More and more communities are developing trails because of the unique opportunities and benefits they provide. As health care and gas prices increase, more and more Hoosiers are looking to trails to provide benefits for the mind, body and wallet. Trails help build strong communities by providing outstanding opportunities for recreation and improving the health of individuals through exercise. They provide outlets for alternative transportation, protect natural resources and stimulate economic development by attracting visitors and providing a higher quality of life.

Trail, path, track, route, trek, all are words that refer to a trail, but what exactly is a 'trail'? When someone says the word trail, there are almost as many different pictures brought to mind as there are people in Indiana.

This section of Indiana's trails plan discusses the different types of trails. For the reader it is an attempt to standardize the various terms and meanings for trail related jargon so those interested in developing Indiana's statewide trails system are on the same page.

The single common denominator of a trail is that it is a linear corridor on land or in water, with access for recreation, fitness or transportation. Beyond this basic premise the image of a trail may vary from a narrow path through a forest to a paved track connecting a school to a housing

development, to a groomed path in the snow. They can be found on a single property or they can connect several properties together. Even rivers and streams serve as a trail for watercraft. They can be privately or publicly owned. In early Indiana, trails served as the major highways and trade routes that connected nomadic groups with each other and the resources they needed to survive.



Trails can be designed to accommodate a variety of uses ranging from pedestrian to motorized. They are made of many materials and can have soft or hard surfaces. The trail surface often dictates the trail use, but not always. Good design, proper construction and maintenance play a big part in the success of a particular trail or system. Soft surfaces include soil, wood chips or water, while hard surface trails are built using materials like gravel, stone, asphalt or concrete.

Since there are so many different reasons to use

trails, corridors can be designed and managed for a single use or for multiple uses. Commonly, trails are used by pedestrians including walkers, hikers, backpackers, joggers and runners. Others are used by equestrians. Still others are used by folks on motorized vehicles. Multiple-use trails can accommodate more than one use. For example walkers and in-line skaters share the trail with bicyclist; hikers and mountain bikers can use the same corridor. Properly designed and managed trails can even accommodate different types of motorized off-road vehicles, all-terrain vehicles and motorcycles.

Multiple Use Trails

Multi-use trails are designed to accommodate more than one type of use, such as hiking and biking or walking and horseback riding. These trails have had special attention paid to their design and thus can withstand different uses without requiring heavy maintenance. Multi-use trails tend to be wider than most single use trails so that they may accommodate more users. They may have lanes so that users can pass when going different directions. Sometimes, if the trail is very narrow, travel is restricted in one direction on one day and the opposite direction the next day. This helps to keep the different uses from interfering with each other as they travel along the trail.

The surfaces of multi-use trails vary widely. Many trails have a hard surface such as concrete or asphalt. These hard surface trails best support walking, jogging, in-line skating and bicycling. Many of Indiana's urban, and some rural multi-use trails, are hard surface trails. Gravel and limestone screenings are another popular surface for multi-use trails. These surfaces in Indiana utilize local materials and also support walking, jogging and bicycling. In many cases screenings are less expensive to install than pavement.

Proper trail etiquette is very important on multi use trails so that every user can have a safe and enjoyable experience. In Indiana, the Cardinal Greenway, the Monon Trail and the Pumpkin Vine trail are examples multi-use trails. Currently, no trails support both motorized use and non-motorized use at the same time, but there are trails in several state forests and state recreation areas as well as many local sites that support both mountain biking and foot traffic.



TRAIL USER ETHICS

Respect the rights of all trail users to enjoy the beauty of the outdoors.

Respect public and private property.

Park your vehicle considerately, taking no more space than needed, without blocking other vehicles, and without impeding access to trails.

Keep to the right when meeting another trail user. Yield the right-of-way to traffic moving uphill.

Slow down and use caution when approaching or overtaking another trail user.

Respect designated areas, trail-use signs and established trails.

When stopping do not block the trail.

Do not disturb wildlife. Avoid areas posted for the protection of wildlife .

Pack out everything you pack in, and do not litter.

Travel speed should be determined by equipment, ability, the terrain, weather, user density and the traffic on the trail.

In case of an emergency, volunteer assistance.

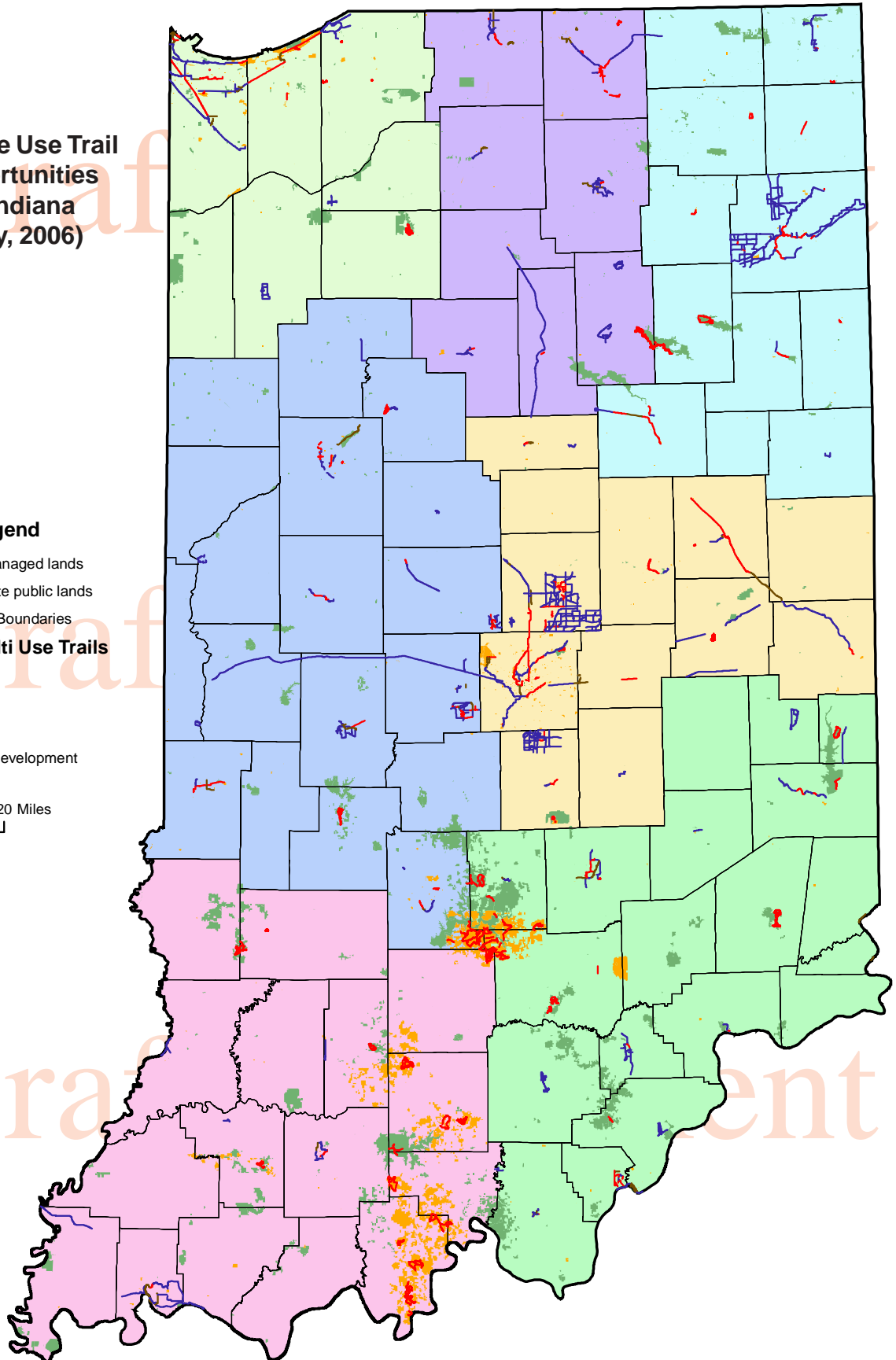
Do not interfere with or harass others. Recognize that people judge all trail users by your actions.

Motorized users should pull off the trail and stop their engines when encountering horseback riders. It is also a good idea to take off your helmet and greet the riders.

Multiple Use Trail Opportunities in Indiana (May, 2006)

- Legend**
- DNR managed lands
 - Non-state public lands
 - County Boundaries
- Indiana Multi Use Trails**
- Trail Status**
- Open
 - Planned
 - Under Development

0 5 10 20 Miles



Trails that Comply with the Americans with Disability Act (ADA)

There are often misunderstandings about what is meant when we talk about Americans with Disabilities Act (ADA) compliance and trails. One of the most common is that accessible trails have to be paved or concrete and all level surfaces. The fact is that people with mobility limitations want a trail experience that is as natural as possible. Neither the Department of Natural Resources nor people with disabilities want to compromise the natural environment. Therefore, this plan does not call for every trail to be made completely “wheelchair accessible”. Some trails can not be made accessible; but many can and should be.

What does it mean to be accessible?

The most common standards for accessibility, the Uniform Federal Accessibility Standards (UFAS) and Americans with Disabilities Act Accessibility Guidelines (ADAAG) address the built environment – bricks and mortar. These documents provide guidance on such things as how wide a door opening is to be or how high a mirror is to be located from the floor, but sometimes these guidelines don’t transfer smoothly to the natural environment. Although not enforceable standards yet, the best guidance for accessible trails comes from the *Accessibility Guidelines: Outdoor Developed Areas* presented to the US Architectural and Transportation Barriers Compliance Board by the Regulatory Negotiation Committee on Accessibility Guidelines in September 1999. Taking into consideration the preservation of the environment, the nature of the outdoor experience and access, the committee explored many approaches and compromised in many areas to reach agreement



on minimum accessibility guidelines for outdoor developed areas.

Basic accessibility

There are “conditions for departure” in the guidelines that allow for deviations from accessibility standards, but to be considered an accessible trail, these four basic components must be present:

Surface – The surface must be firm and stable. Firmness means the surface “does not give way significantly under foot.” Stability means that the surfaces “do not shift from side-to-side or when turning (as in a wheelchair)”. A rotational penetrometer is the best way to measure this, but the presence of footprints or wheel tracks is a good indicator that the surface is neither firm nor stable.

Width – The clear tread width of the trail is the width of the usable trail tread measured perpendicular to the direction of travel and on or parallel to the surface of the usable trail tread. The minimum width for a specified length of a trail to be considered accessible is 36 inches.

Protruding Objects- Nothing shall protrude into the vertical clearance of an accessible trail less than 80 inches in height and the 36 inches of trail width.


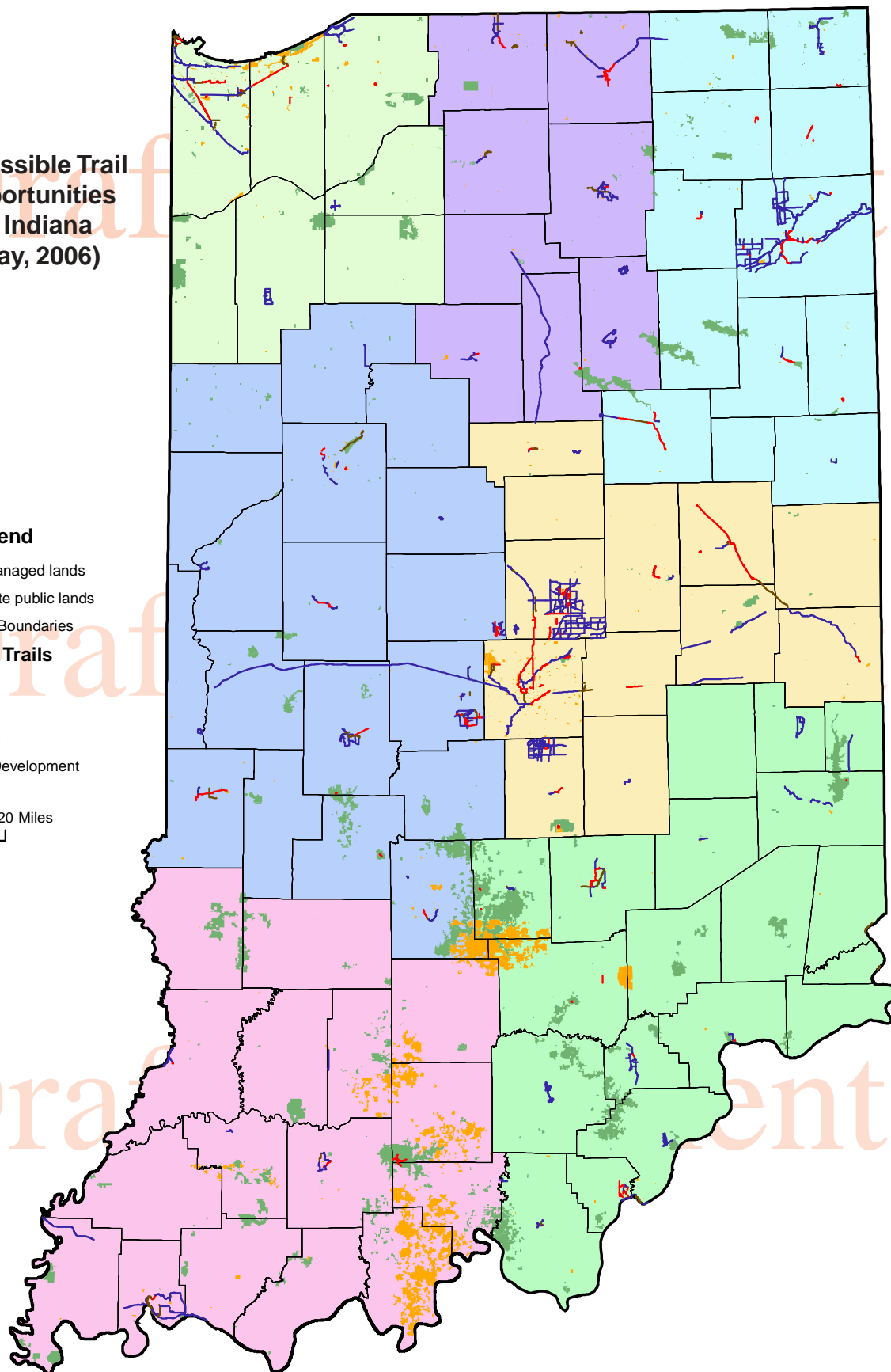
Slopes – The running slope is the grade of the surface measured in the dominate direction of travel. Preferably this grade should be no more than 1:20 (5%), but no more than 30% of a total trail length shall exceed 1 inch up for 12 inches in length (8.33%). The cross slope is the grade of the surface measured from side to side and shall not exceed 1 inch up for every 20 inches in length (5%).

There are a number of other features that must be examined to determine compliance with accessibility requirements – openings in the surface, tread obstacles, passing spaces, edge protection, resting intervals, signs, pit toilets, etc. – but they should be evaluated by an individual trained to assess these requirements. We have simply attempted here to provide some basic thoughts about accessibility. Please do not consider this a guide to compliance.

Accessible Trail Opportunities in Indiana (May, 2006)

- Legend**
- DNR managed lands
 - Non-state public lands
 - County Boundaries
- Accessible Trails**
- Trail Status**
- Open
 - Planned
 - Under Development

0 5 10 20 Miles

Bikeways

All communities and counties are encouraged to develop a bike route system that supports community connectivity, interfaces with other transportation resources and connects to the developing trails system. Bicycling has been a popular recreation activity in Indiana. In 2003 approximately 43% of the respondents indicate they used a bicycle recreationally. Increasingly, people are riding bikes in Indiana as a reliable and economical mode of transportation. In the 1990 and 2000 censuses, the percentage of the population who used bicycle for transportation was at about 2%. As gas prices continue to rise, the level of bicycle use for transportation as well as recreation is expected to continue to increase.

Currently, local bike clubs, followed by metropolitan planning organizations are taking the lead in developing bike routes in various Indiana counties. Some regions have formalized routes that are published through local tourist and economic development entities. Many local clubs maintain excellent websites that assist the user in choosing their own routes. In some areas of Indiana there is a coordinated approach to the development of on-road and off-road bicycle routes, but this is by no means the norm. A statewide effort would significantly impact the availability of bicycle opportunities.

Bicycle facility planning in Indiana is in its infancy and consequently still evolving. The Indiana Department of Transportation has indicated that the development of an Indiana Bikeway plan is necessary. This plan should provide planners and managers with a solid framework for meeting a wide variety of bicycling needs. Since bikeways encompass both on-road and off-road routes, a comprehensive study of existing on road routes is necessary. The current trails inventory only covers those bike routes that are incorporated as off road trails. On-road routes are generally not included because of the staff time involved in tracking them.

As with any trail planning, the most important aspect of bicycle planning involves obtaining input from the bicycling public. Many areas in Indiana have organized bicycling clubs that help gather

and provide information. However, not all community bicycling needs are represented by clubs. Therefore, governmental agencies and the public should be involved throughout the process.

Bicycle plans should be compatible with 1) local comprehensive plans; 2) transportation plans developed at the local, regional (Metropolitan Planning Organization - MPO), or state levels; 3) transit plans; and 4) parks and recreation plans. Where appropriate, plans should follow American Association of State Highway and Transportation Officials (AASHTO) design guidelines.

Following the planning, design criteria should be established. Then performance criteria should be established, possibly including: accessibility, directness, continuity, route attractiveness, low conflict, cost, ease of implementation, and multi-modal coordination. An analysis should be made — compiling an inventory of significant origins and destinations, projected and current bicycle use, existing bicycle facilities, planned highways improvements, and local comprehensive plans. Next, desired routes should be developed and evaluated and types of facilities designated. This should be followed by bicycle education, safety, law enforcement and encouragement programs. After development and adoption, the final step is implementation.

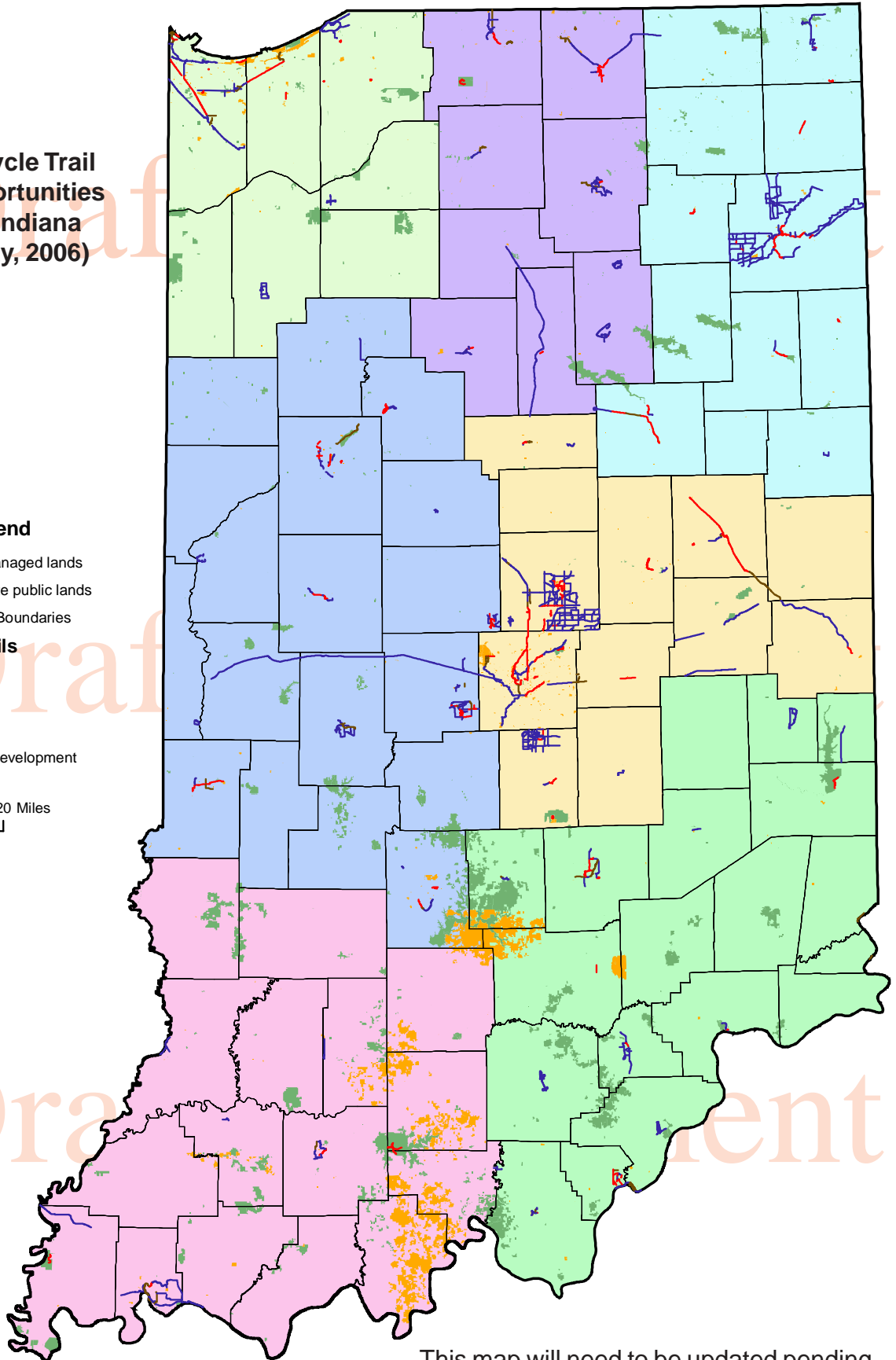
Counties With Bicycle Routes



Bicycle Trail Opportunities in Indiana (May, 2006)

- Legend**
- DNR managed lands
 - Non-state public lands
 - County Boundaries
- Bicycle Trails**
- Trail Status**
- Open
 - Planned
 - Under Development

0 5 10 20 Miles



This map will need to be updated pending location of mapped bikeways data.

Mountain Bike Trails

Mountain biking has grown from an obscure sport created in the late 1970's in the western United States to one of the largest and fastest growing outdoor sports in the world. It is enjoyed by people of all ages, nationalities and income levels. Because of the varied nature of the sport and the disciplines that it includes, mountain biking can be done anywhere from a back yard to a gravel road. However, the majority of mountain bikers prefer to ride trails they call singletrack. These are narrow trails that run through forests or fields.

Considering that nearly 40% of adults in the U.S. report they ride bicycles, mountain biking is a sport that is enjoyed by millions of Americans. Mountain biking is also a sport that can be enjoyed throughout a person's lifetime. Mountain bikes help to fuel the bicycle industry in the U.S. which is a \$5.5 billion industry that employs close to 100,000 people. The inherent comfort and flexibility of the modern mountain bike has led to an estimated 80% market share of bicycle sales in countries like the United States, United Kingdom, Canada, Australia and New Zealand. In Indiana, mountain bikes can be ridden year-round with proper equipment and clothing.

Advocacy organizations employ a variety of means including education, trail work days and trail patrols. Examples of trail work days can include: flagging, removing downed trees after a storm, cutting and/or signing a new trail. They also provide programs to educate local bicycle riders, property managers and other user groups on the proper development of trails. The International Mountain Bicycling Association (IMBA) rules of the Trail is an example of such courses. In Indiana, the statewide organization that represents mountain bikers is the Hoosier Mountain Bike Association (HMBA). The HMBA is an affiliate club of the IMBA. The HMBA also works with smaller local and regional clubs in Indiana to further the cause for mountain bikers. The Indiana Bicycle Coalition also represents mountain bikers and has done substantial work to further the cause of mountain biking in Indiana.

Dozens of miles of multi-use trails have been built in Indiana, utilizing IMBA's well-respected and widely used Trail Solutions manual to build

sustainable trails. By default, every mile of trail that HMBA builds in Indiana is multi-use. In addition to being used by mountain bikers, all of HMBA's trails are open to walkers, hikers, backpackers and trail runners. Properly designed mountain bike trails are appropriate and enjoyable for many types of users to enjoy. This makes mountain bike trails a useful and attractive outdoor amenity. Properly built mountain bike trails have little environmental impact. Studies reported in the IMBA Trail Solutions manual show that mountain biking's impact is comparable to or even less than other forms of trail use. In contrast to other types of trails, mountain bike trails can be built quickly. This makes more trails available to Indiana's citizens. For example, the federal RTP program has funded 100 miles of trail projects in Indiana since 1995. While most funded projects create just a few miles of trails, the Brown County RTP project will create almost 15 miles of new trails including amenities.

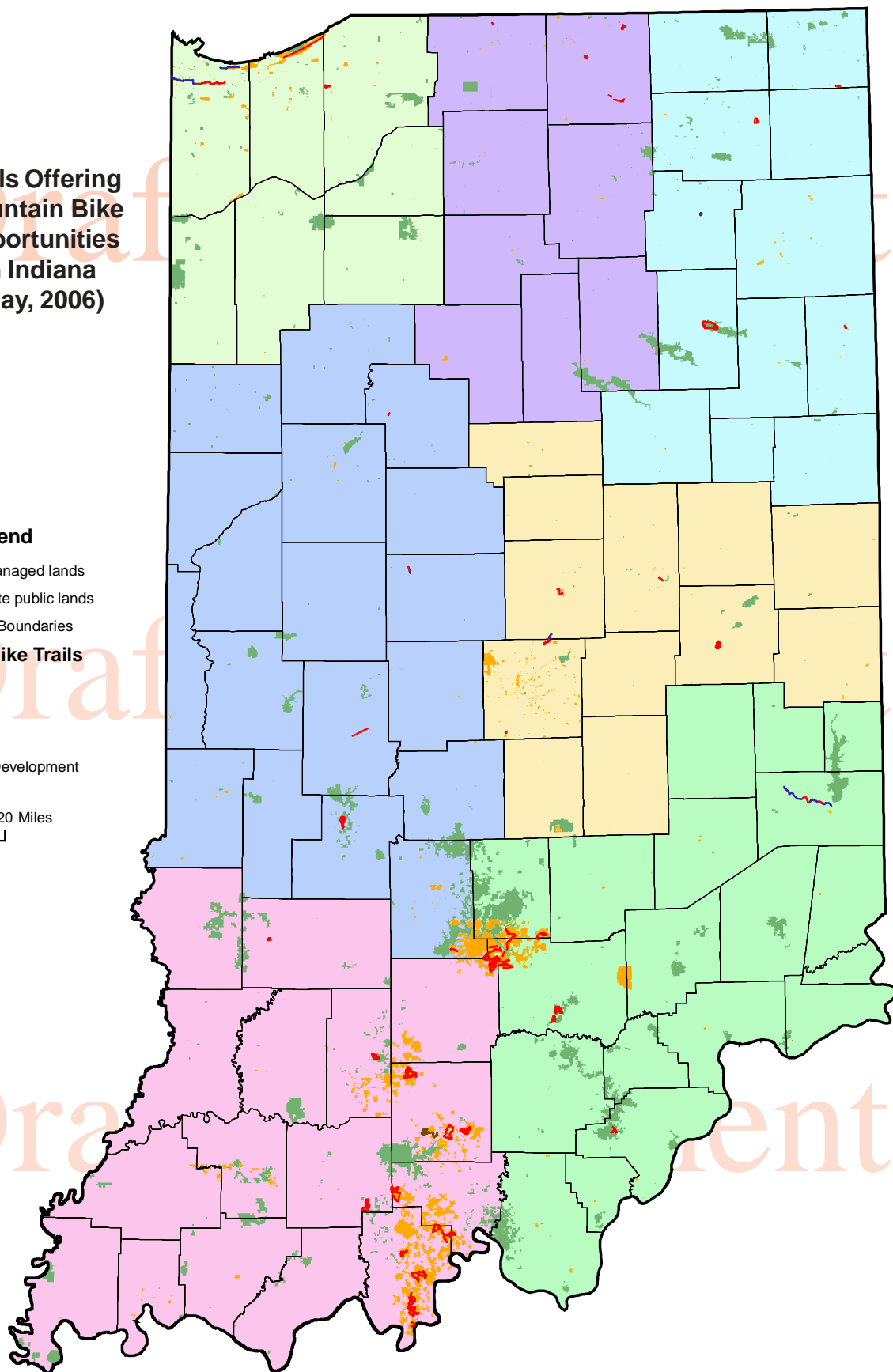
Connectivity of trail amenities leads to increased use and more tourism. For example, at Rangeline Nature Preserve in Anderson the new mountain bike trails connect to downtown via a path along the river. The new trail system being built at Brown County State Park will ultimately connect to the Salt Creek Trail running from Nashville to the state park entrance. When building trails, the HMBA always tries to make links to cultural and historic sites as well. Here is an example of one of the larger and higher-profile projects that the HMBA is currently participating in.

Brown County is Indiana's largest state park and is quickly becoming a prime mountain biking destination in the Midwest. The HMBA has been hard at work building some of the best single track trails around. With two fully completed loops, as well as an out and back trail to Hesitation Point, Brown County has approximately 12 miles of trail, with much more to come. 2006 holds a lot of promise for Brown County. A Recreational Trails Program Grant will fund 10-15 additional miles to be professionally designed and finished by volunteers. This is an exciting time for mountain bikers in Indiana, as Brown County is sure to become a well known bicycle destination, with some of the best designed trails in the mid-west.

Trails Offering Mountain Bike Opportunities in Indiana (May, 2006)

- Legend**
- DNR managed lands
 - Non-state public lands
 - County Boundaries
- Mountain Bike Trails**
- Trail Status**
- Open
 - Planned
 - Under Development

0 5 10 20 Miles



Indiana Rail-Trails

Based on information collected by the Rails-To-Trails Conservancy, there were 12,585 miles of rail-trails in the U.S. in 2004. As of July 2004 there were 146 miles of rail-trail open in Indiana, according to the Hoosier Rails to Trails Council. (Their website, <http://www.indianatrails.org/>, provides a current and comprehensive look at rail-to-trail projects all over the state.)

Several rail-trails are under development around Indiana. The Cardinal Greenway, part of the 6,000-mile American Discovery Trail, will extend about 75 miles and connect Richmond, Muncie and Marion. The first 10-mile segment opened in Muncie in 1998. By 2002 over 30 miles of the Cardinal were open for use in Marion, Grant County, Delaware County, Muncie and Richmond. The B&O Trail, another rail-trail of statewide importance, will be 63 miles long and permit non-motorized travel from Speedway in Marion County, through Hendricks and Putnam Counties, to the Wabash River in Parke County.

Travel the 11.5-mile Erie Lackawanna Trail in Lake County to the 7.5-mile Oak Savannah Trail. Then take the 10.2-mile Prairie Duneland Trail and bridge the gap to the reopened Calumet Trail in Porter County. Through these few miles of trails, one gets the feeling of commitment to trails that exists in northwest corner of Indiana. Northwest Indiana leads the state in rail-to-trail projects. Additional links under development along abandoned



railways and utility rights-of-way in Porter and Lake Counties are creating a regional trail network. Supplementing various multi-use paths in LaPorte and Porter Counties, a network of designated bike routes creates an even more comprehensive system for bicycle travel.

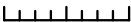
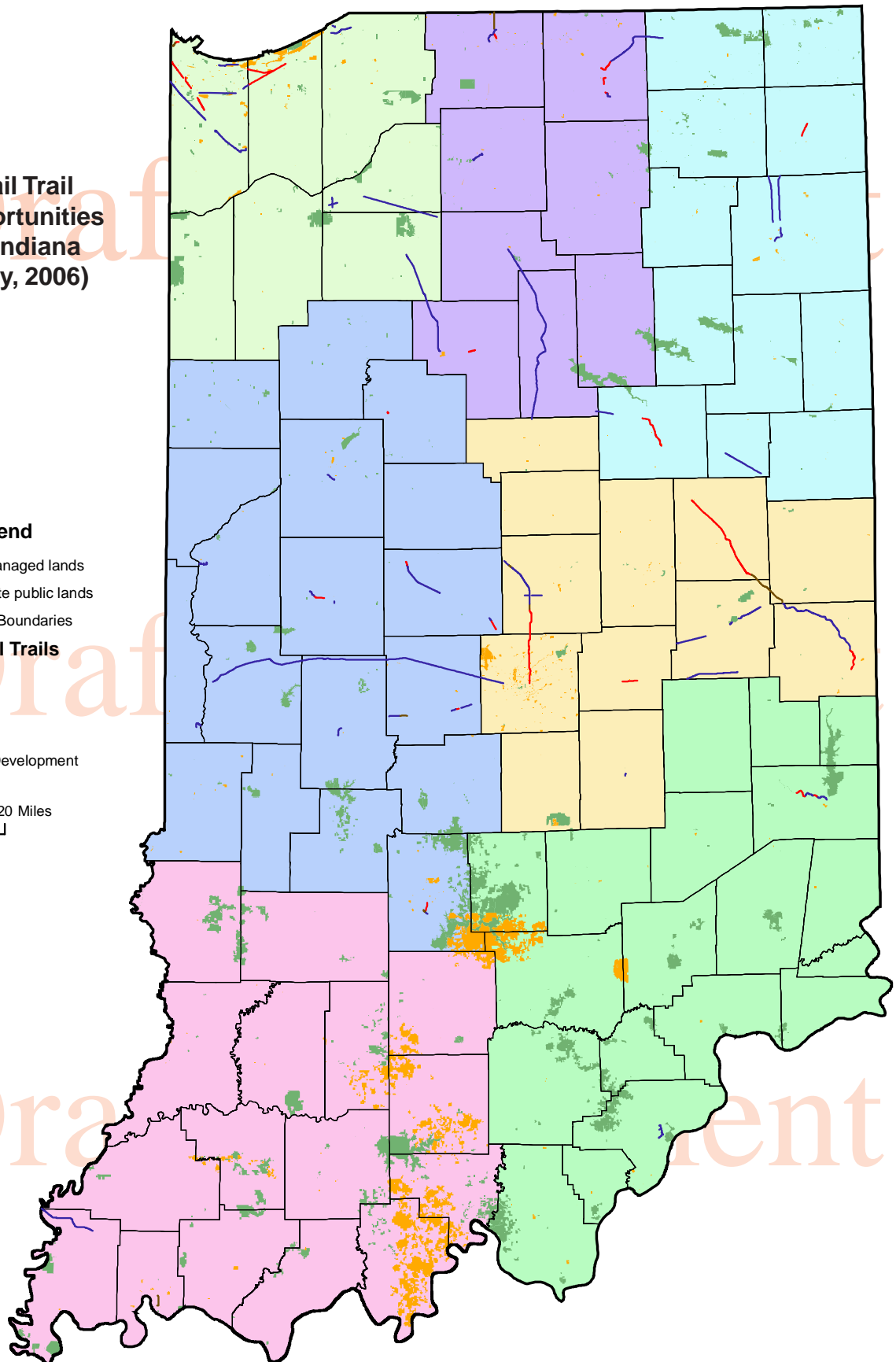
In 1996, the first phase of the Monon Trail opened in Indianapolis with reports of very heavy use. In 2004, the last phase of the Monon was completed. In 2001, the City of Carmel completed a five-mile extension of the Monon. With 16.5 miles open for use, this immensely popular trail will now be extended into Westfield and beyond. About half the funds awarded through the Federal Transportation Enhancement Program administered by the Indiana Department of Transportation support rail-trail and other bicycle and pedestrian projects in Indiana.



Rail Trail Opportunities in Indiana (May, 2006)

- Legend**
- DNR managed lands
 - Non-state public lands
 - County Boundaries
- Indiana Rail Trails**
- Trail Status**
- Open
 - Planned
 - Under Development

0 5 10 20 Miles

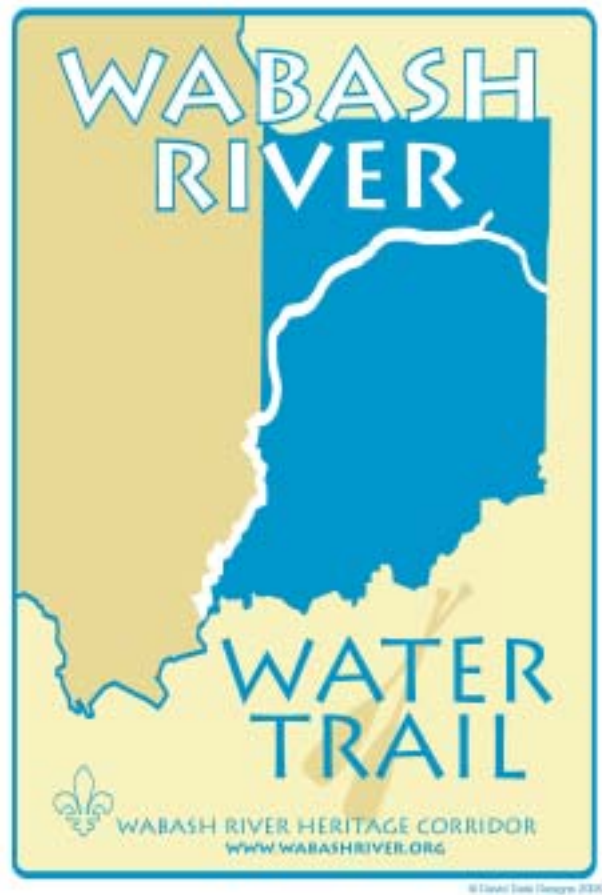



Water Trails

Trails are often thought of as land based features, however rivers, streams and lakes offer another type of trail. Water trails are sometimes referred to as blueways. The simplest water trail consists of a place to launch a vessel, a place to take it out and the water as a path connecting the two.

Water trails played an important part in American history. Rivers, canals and lakes have been used as a means of transportation and trade for centuries. Before there were roads, there were waterways. Waterways were such an important part of commerce that many of Indiana's cities and towns began and grew on ports or along rivers. Although the Ohio River and the Great Lakes continue to serve as major commercial routes, purpose for travel on Indiana waterways has shifted more from transporting goods to recreational use including boating and fishing.

Recreational boating, including canoeing and kayaking, is helping to create a new kind of commerce on Indiana waterways. There are more than 35 Indiana businesses and public facilities that rent kayaks or canoes. Many provide a shuttle service taking paddlers and gear to a launch site, provide pick-up at the destination and transportation back to parking and personal vehicles. Websites and travel literature are good sources for information about canoeing and kayaking opportunities and liveries that offer services.



The Indiana Department of Natural Resources (DNR) specifically defines a water trail as having two designated public access sites within reasonable distance (about 15 miles or less). Use of public access sites assures there will be safe access to the water and formal parking facilities. While it may be legal to launch a boat using public right of way at a bridge crossing, these locations are not recommended for the general public. A number of private sector sources continue to identify bridge crossing right of ways for access, but DNR is moving toward recommending official public access sites only.

A comprehensive modern water trail would have official public access sites, but would also include maps, signage, camping/lodging, restrooms and convenient places to secure necessary supplies. The Wabash River Heritage Corridor Commission (WRHCC) is working to map the entire Wabash River in Indiana as a comprehensive modern water trail. The Wabash River is a navigable stream for 441 miles, almost the entire length through Indiana. It is the longest stretch of un-dammed wild river

east of the Mississippi in the United State. New maps will make the public aware of significant sites on this cross-state water trail that links not only the northeast portion of the state to the southwest, but also links travelers to Hoosier heritage along this historic river corridor. From a boat, the river will be a living, moving museum of Indiana history and natural heritage.

Disputes sometimes occur about ownership of stream banks and stream beds. Most of the land along the rivers in Indiana is privately owned and should not be used without permission. This is why having a public access site is so important. If a river has been determined navigable, then the water and riverbed are held in public trust by the State and the water and riverbed are useable by the public for recreation. According to the Indiana Natural Resources Commission (NRC), *Navigable waters are those that were “susceptible” to boating “according to the general rules of river transportation at the time Indiana was admitted to the Union [1816].”*

The NRC reviewed historical documents and established a list of the Indiana navigable streams. Just because a waterway is not listed it does not mean it is not navigable. It just means no historical

information has been presented that would support declaring it navigable. Disputes involving the Indiana navigable waterways listing would have to involve a court decision or a ruling by the NRC. A list of navigable rivers is available from the Natural Resources Commission and can be seen on their webpage along with more information. <http://www.in.gov/nrc/policy/navigati.html>

With thousands of miles of river and hundreds of lakes, Indiana is a great state for boating including paddling a canoe or a kayak. Wherever you are on the water, all watercraft users must have a wearable personal floatation device (PFD), even on a lazy Indiana river. Indiana does not require registration on watercraft without a motor. The rivers and streams of Indiana are not listed above Class II, meaning rapids and whitewater are not typical along streams except in the event of high water after rain events. Indiana waterways and water trails provide an opportunity to enjoy Hoosier outdoors at its best. The experience can be vigorous exercise or a leisurely float. Boaters can go fishing and watch the wildlife as they float along the way, participate in stream clean up activities or just enjoy the scenery.



Equestrian Trails

Horses have a special place in the history and culture of the United States and Indiana in particular. Even today, throughout Indiana, horses are also used as the primary form of transportation by the Amish and an alternative for those who prefer carriages to riding horseback. Equestrians are credited with developing many of the nation's earliest trails and they continue their trailblazing legacy. Many Hoosiers ride their horse for sheer joy of the activity. Some support their family working for one of the growing numbers of equine businesses. Still, others are breeders and competitors at the highest levels. Together they all contribute to the economic health of Indiana through their shared passion for Horses.

Interest in recreational equestrian use in Indiana has grown in the past ten years despite a steady decrease in available opportunities due to increases in urban sprawl and designated trail systems. The average age of riders has also risen with many retirees taking up the activity to gain access to the great outdoors. Recreational trail riding in Indiana takes place daily and year round. A comprehensive research document compiled by the American horse industry titled "***The Economic Impact of the Horse Industry in the United States***", conducted by Deloitte Consulting, LLC, states that 105,700 horses are used in Indiana for recreational horseback riding with an economic impact valued at \$1.3 billion total. This study highlights the importance of the recreational sector of the horse industry.

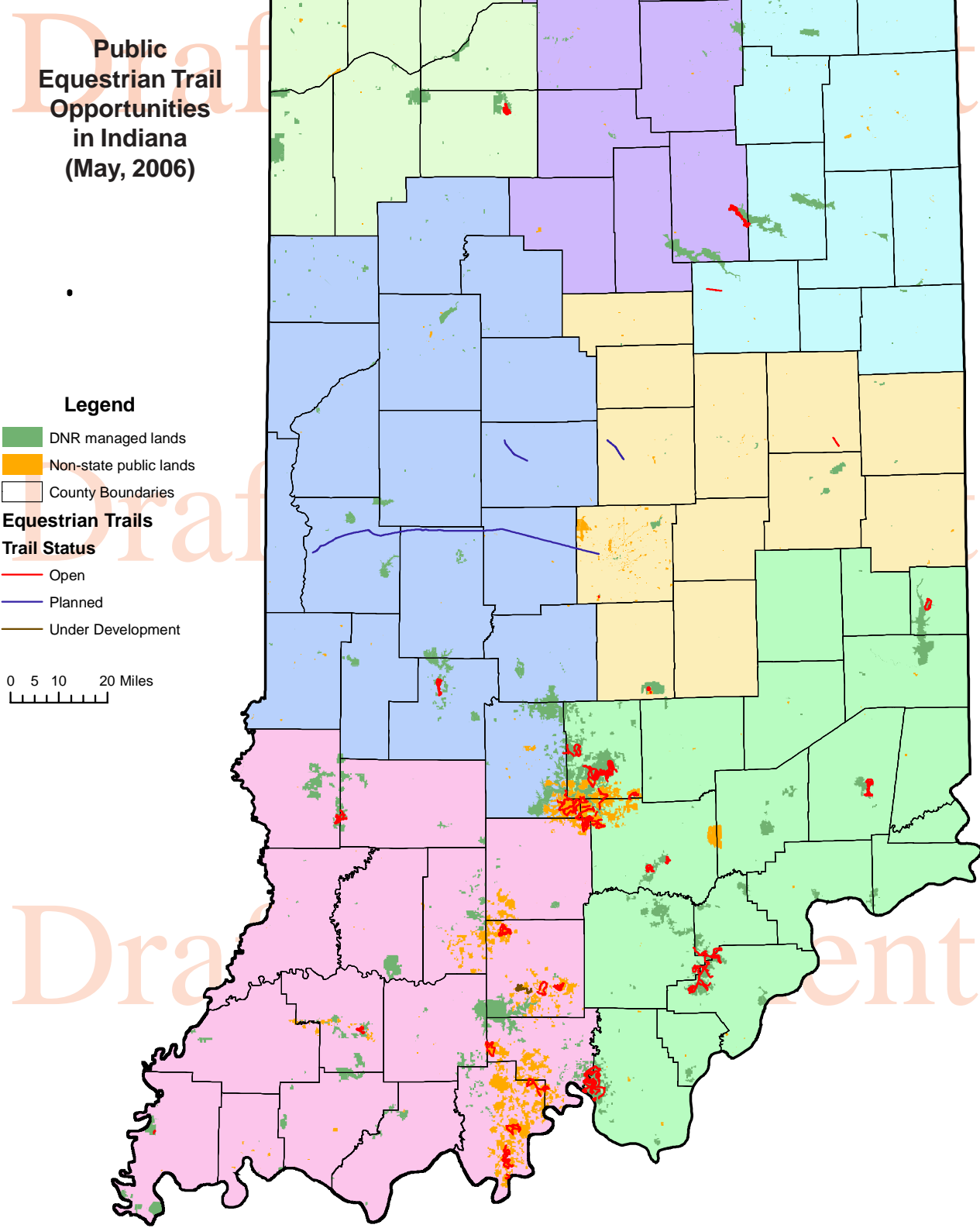
Indiana has many untapped resources available to accommodate recreational riding. Northern Indiana has a particular lack of riding opportunities from undesignated trail systems available. Equestrians' love of the backcountry and their need for open land in suburban areas make rail-trails a perfect match for equestrian use. Horseback riders like rail-trails because they provide separated paths from motorized vehicles, which is a much safer environment for both horse and rider. Where equestrian use is high, some trails even have separated bridal paths for a more enjoyable riding experience. The key is a good working relationship with local planners, government officials, and other trail user groups. Willingness to participate in the



process of acquiring the rights-of-way, building the trail, and maintaining and policing the trail after completion will do much to meet current and future demands.

Because there are many types of trail rides, a variety of options should be made available. The basic and most important requirement is for trail facilities to be close to where horses are stabled. Trails should be from two to twenty-five miles in length, which is fairly easy to meet in the more rural parts of the state, but becomes increasingly difficult as the more urban areas are approached. Urban sprawl has replaced farm land and open space with housing and commercial areas, thereby forcing the equestrian ever further from the city center. Public development of greenways, such as stream valley corridors, abandoned roads and railroads, utility corridors, etc., will have to become standard procedure if the future trail needs of equestrians and other trail users are to be met.

Managing horse trails and facilities on public lands can create challenges for land managers. Differences of opinions can arise between user groups. Careful planning and design goes a long way in overcoming these challenges. Parallel trails are often practical in a wider corridor and should be considered. In the past, off-road vehicles (ORVs) and horses were not considered compatible. Reducing ORV noise levels, proper trail planning, and good trail etiquette can mitigate the vast majority of these past concerns. Using ORVs to support organized horse events has proven mutually beneficial, allowing both user groups to learn more about dual use possibilities.



Motorized Trail Use

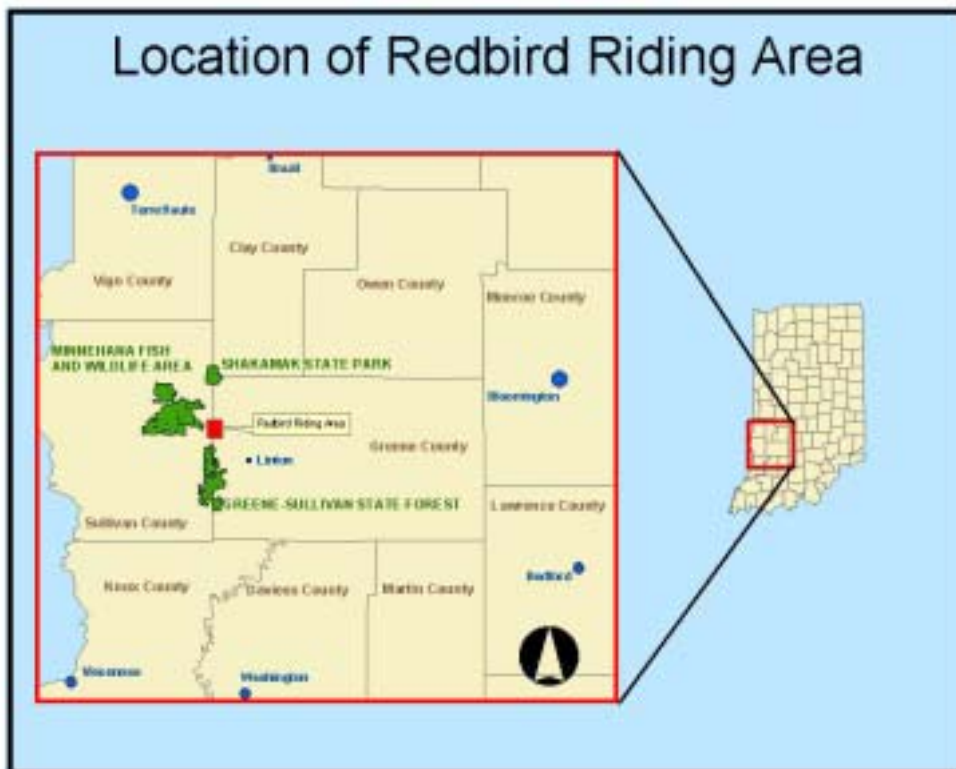
Motorized off-road vehicle use in Indiana has seen a significant increase over the past ten years. All terrain vehicle (ATV) riding increased from 5.6% of the population to 8.3%. Four wheeled drive off-road use increased from 8.8% to 11.4%. Off-road motorcycle riding remained steady at between 5% and 6% of the population. The increase in motorized vehicle recreation is reflected in the number of Indiana registered off-road vehicles. Between 1995 and 2005, the number of registered off-road vehicles increased from 9,175 vehicles to 32,176 vehicles.

With the increased use of off-road vehicles (ORVs), alternately known as off-highway vehicles (OHVs), has come increased demand for places to ride. In response to this demand, Indiana DNR, in cooperation with Indiana off-road vehicle clubs, opened the Redbird State Riding Area in 2003. Redbird SRA is located on former coal mine land in Greene and Sullivan counties near Dugger, Indiana. Although Redbird is open for riding, it is still under development. Redbird Riding Area is expected to provide approximately 70 miles of off-road vehicle trails on over 1,000 acres of land when fully developed.



Indiana DNR is also planning to provide off-road vehicle riding at a property known as Interlake in Pike and Warrick counties near Lynnvill, Indiana. Interlake, like Redbird, is situated on former coal mining land. At over 3,000 acres, Interlake is expected to provide trail opportunities for several user groups including off-road vehicle users, equestrians and mountain bikers and non trails groups such as hunters, anglers and birdwatchers. Upon completion of a property survey at Interlake, a master plan will be completed to guide property development and management.

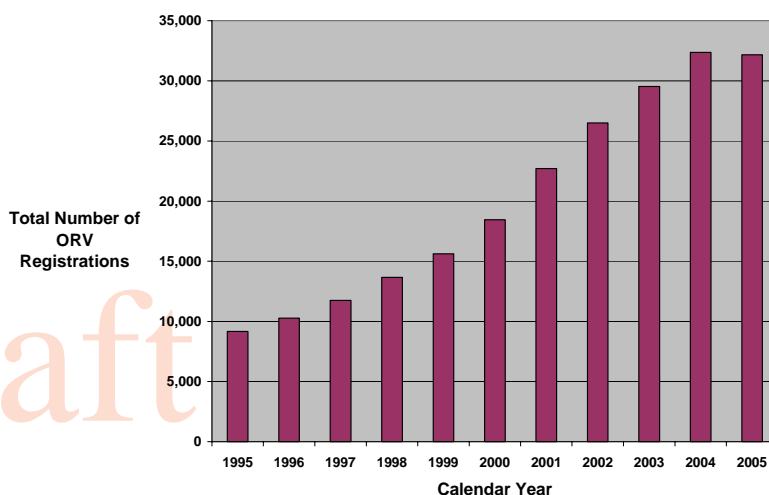
Other Indiana off-road vehicle riding facilities are helping to meet the demand for this type of



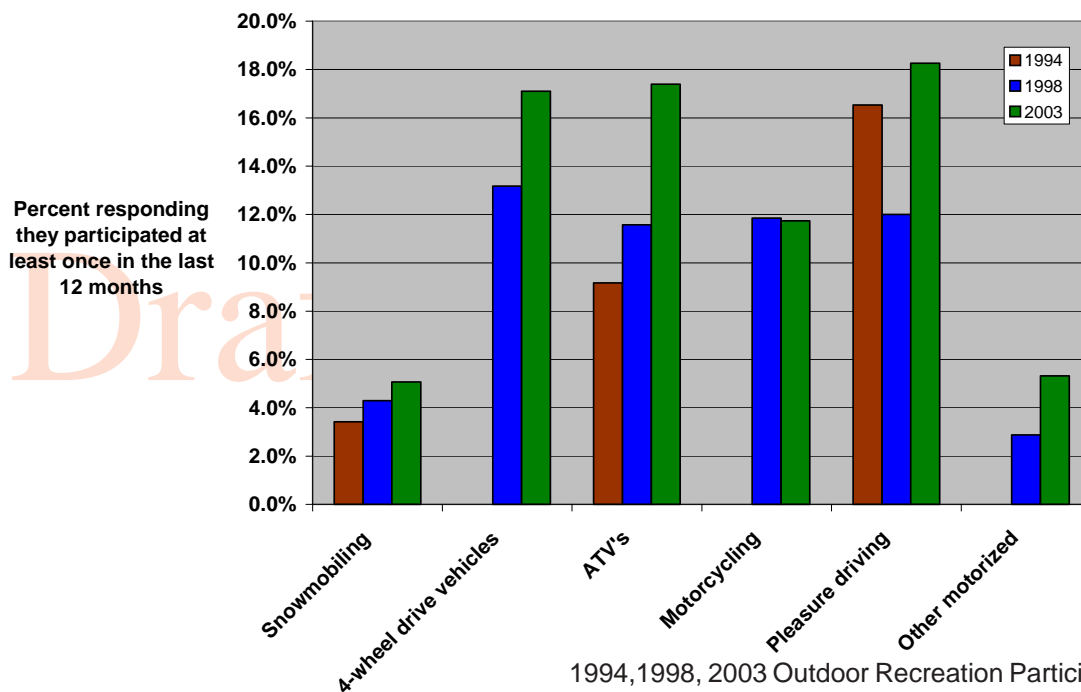
recreation. Private, for profit, facilities include Badlands near Attica, Guion Hill ATV Park near Rockville, and Haspin Acres near Laurel. ABATE of Indiana recently opened the Lawrence County Recreation Park near Springville. Also, Prairie Creek Reservoir and Park near Muncie has an off-road vehicle riding area. All of the existing and planned off-road vehicle riding facilities open to the public are located in the southern two thirds of Indiana.

As with other types of recreation, off-road vehicle riding can be a social activity that is shared by family and friends. There are 27 known off-road vehicle clubs in Indiana. Besides social activities, the clubs serve as way for individuals to gain knowledge and expertise with the sport of off-roading, including educating members about trail stewardship and trail sharing ethics programs such as Tread Lightly. Indiana off-road vehicle clubs also provide opportunities for members to get involved with volunteer trail maintenance events.

Annual Off Road Vehicle Registration



Motorized Use Participation Through Time in Indiana



1994, 1998, 2003 Outdoor Recreation Participation Surveys.

Snowmobile Trails



When the leaves fall off the trees, the hiking boots go back in the closet, the boats have been put into storage and the most bikes have been tucked away, another activity is just getting started. For many Hoosiers recreating in freezing temperatures

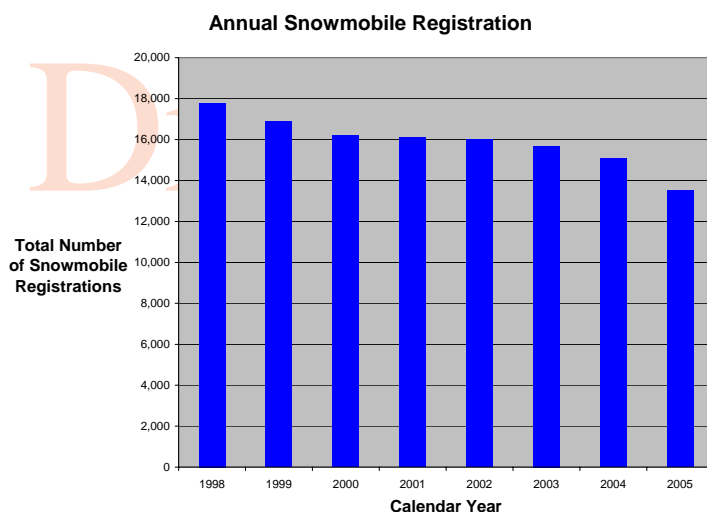
sounds like a good idea. Thousands of people go snowmobiling in the United States every year. Covering more ground in a day than one could in a week on foot with a group of friends is what keeps people excited. The snowmobile's motor and rear track pushes travels along with surprising ease on the slick and powdery surface. The snowmobile will cruise slowly through the trees allowing the rider to soak up the white wonderland and even catch a glimpse of deer foraging.

Like many other recreational activities, snowmobiling is enjoyed as a social sport. People travel in groups to enjoy the cold outdoors. There are at least 13 snowmobile clubs in the northern half of Indiana. Friends and family spend as much time enjoying each others' company as they do sledding. It has to be a social sport, similar to other motor sports, one of the main rules of the Safe Riders! program is to never sled alone. To aid these rules, safety courses are put on by local law enforcement and the Indiana Snowmobiling

Association to help new riders learn what it takes to ride and be safe.

Snowmobiling is not a inexpensive sport; it is one of the most expensive forms of trail recreation. The snowmobile is not the only cost; riders need proper clothing, a trailer, a truck to pull it all with and some gas money. Nationwide, snowmobiling is a big business, for both manufacturing and tourism. According to recent economic impact studies performed by Iowa State University, Plymouth State University in New Hampshire and the University of Minnesota, snowmobiling generates slightly over \$27 billion worth of economic activity in the United States and Canada and is directly responsible for at least 85,000 full time employment jobs. Snowmobilers love their winter sport and the average person spends approximately \$2500.00 per year on snowmobile related activities which include food, lodging and travel. Even Indiana benefits from snowmobile tourism. When a good snow falls, residents of Michigan, Ohio and Illinois travel to the Indiana snowmobile trails.

Indiana has five snowmobile trails located in the northern section of the state. These winter use trails are like no others in the state; they exist for only a few months a year. Agricultural and forested property is leased from December through March when farmers and landowners are not using it for crops. It is a great opportunity for snowmobilers to access otherwise idle land. Once the snow melts in the spring, the trail markers and signs are removed and fields become productive farmground again.



The Department of Natural Resources cooperates with the Indiana Snowmobile Association, local clubs and landowners to provide this motorized winter recreation. The land is privately owned and leased by the local snowmobile trail clubs. Volunteers from those clubs provide all the labor needed to keep the trails operational. This includes meeting with landowners to secure leases, building the trail, maintaining trail building equipment and grooming the trail when needed. Without this volunteer workforce, the program could not financially support itself. DNR employees

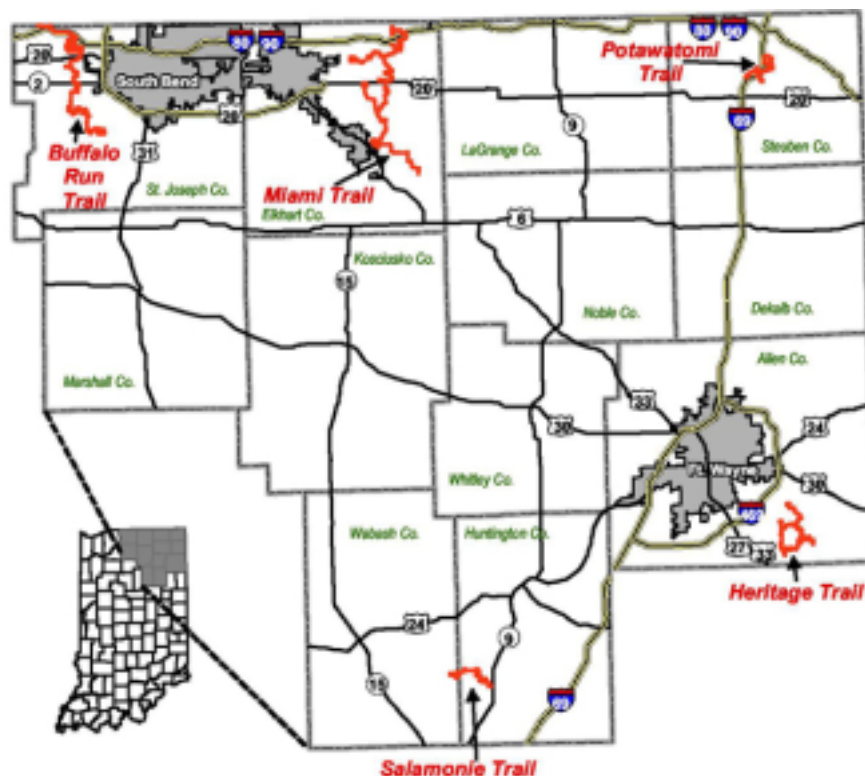


handle most of the paperwork and behind the scenes work to keep the trails open.

The money needed to pay the landowners for the use of their land and to cover the clubs' cost of maintaining the trails comes entirely from snowmobile registrations. Over 12,000 snowmobiles are registered in Indiana at any given time. Registration costs \$30 for 3 years and 100% of that money goes into the program that gives Hoosiers a legal place to ride and enjoy the outdoors when the thermometer drops below freezing. The number of registered snowmobiles has decreased in recent years, possibly due to a decrease in snowfall over the same period, which has contributed to a dwindling balance in the snowmobile program account.

Over 200 miles are available to the hardy souls who love a white landscape.

- The Miami snowmobile trail is 62 miles of trail maintained by the Elkhart County Snowmobile Club around Goshen, Bristol, and Middlebury in northeastern Elkhart County.
- The Potawatomi trail is 14 miles of trails maintained by the Potawatomi Snowmobile Club north of Angola in Steuben County.
- The Heritage trail is 34 miles of trail maintained by the Hoagland Blizzard Blazers Snowmobile Club around Hoagland and Maples in southeastern Allen County.
- The Buffalo Run snowmobile trail is 73 miles of trails maintained by the South Bend Snowmobile Club west of South Bend in St. Joseph County.
- The Salamonie Trail is maintained by the Salamonie Trailmasters Snowmobile Club and consists of about 40 miles of trail on public land along the south side of Salamonie Reservoir in Wabash and Huntington counties. This trail differs from the other trails because it is entirely on State owned property.



Single-use Trails

Single use trails are designed or designated for a single purpose. While the thought is unconventional, roads in Indiana can be described as single use trails because they are specifically designed for motorized vehicular traffic. On a more practical level, the single use trail that most often come to mind are those trails found on Indiana's state parks. Hiking trails are generally single use trails because of their isolation, deference to the natural environment and because the surface is soil or forest litter. Bicycle, horse, mountain bike, snowmobile, off-road vehicle, canoe and hiking are all examples of trail activities that could require a trail to be designated single use trails.

Trails are often designated as single use trails for the sake of safety. Motorized recreation trails are single use because of the size, weight and speed of the vehicles. While motorized trails may be suited for other uses, it is not always safe for trail users. Speed is also a factor in determining how many uses a trail will support. Certain bicycle and running trails may be designated as single use.

The level of expertise required to negotiate the trail requires higher speeds than then casual user would reach. Conversely, restricting speed on a trail may have the unintended consequence of limiting its use to a single trail activity.

The number of users a trail supports is also a factor in determining how many types of trail uses will be allowed. If a trail is used heavily for a particular activity it may be safer to designate the trail solely for that purpose. Accidents are more likely to happen in over crowded situations. The overall user experience may benefit from a single use too. A congested trail can degrade the user's experience if relaxation and nature watching is the goal. Separate trails may also relieve crowding and conflict at trailheads where people access the trails.



Single Use Trail Opportunities in Indiana (May, 2006)


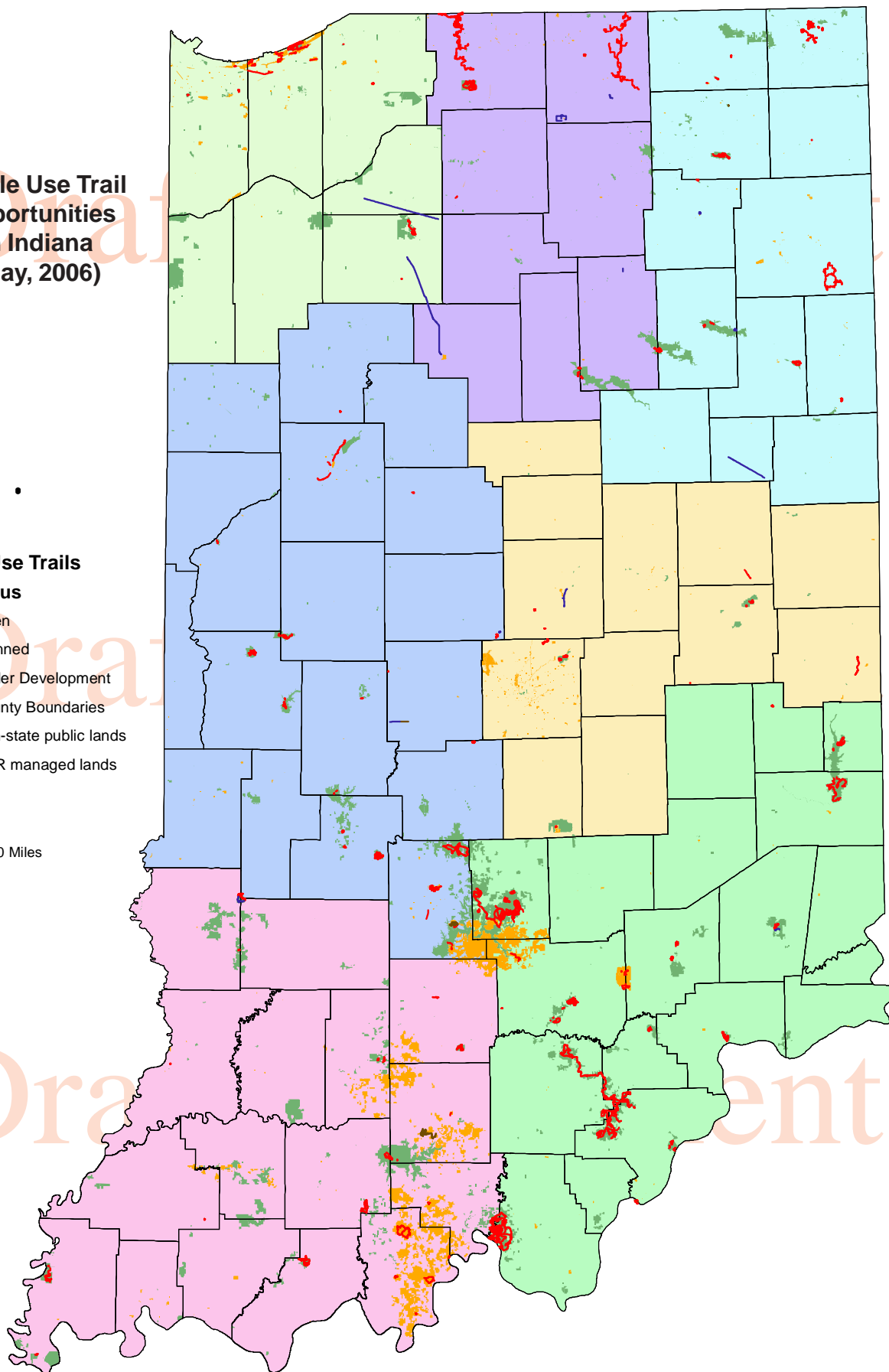
Legend

Single Use Trails

Trail Status

- Open
- Planned
- Under Development
- County Boundaries
- Non-state public lands
- DNR managed lands

0 2.5 5 10 Miles



Indiana's Longest Foot Path

Southern Indiana contains Indiana's premier hiking trail, the Knobstone. The Knobstone Trail (KT) is Indiana's longest footpath - a 58-mile backcountry-hiking trail passing through Clark State Forest, Elk Creek Public Fishing Area and Jackson-Washington State Forest. The first sections of the Knobstone were opened to the public in 1980.

Within the Indiana Department of Natural Resources, the Divisions of Fish and Wildlife, Forestry and Outdoor Recreation developed the Knobstone Trail. The Division of Outdoor Recreation's Streams and Trails Section coordinates development and maintenance of the trail, while Forestry is the owner of most of the land. The Nature Conservancy helped acquire land necessary to complete the trail corridor. Indiana Heritage Trust Funds and federal Land and Water Conservation Fund (LWCF) monies were used as well. Much of the initial trail construction was accomplished through the Young Adult Conservation Corps program. To keep the trail free of fallen trees and in good shape, primary construction and maintenance of the trail is done by DNR employees. Many hours of volunteer work donated by various hiking clubs and other such groups as the Hoosier Hikers Council to fix erosion problems and help with trail work.

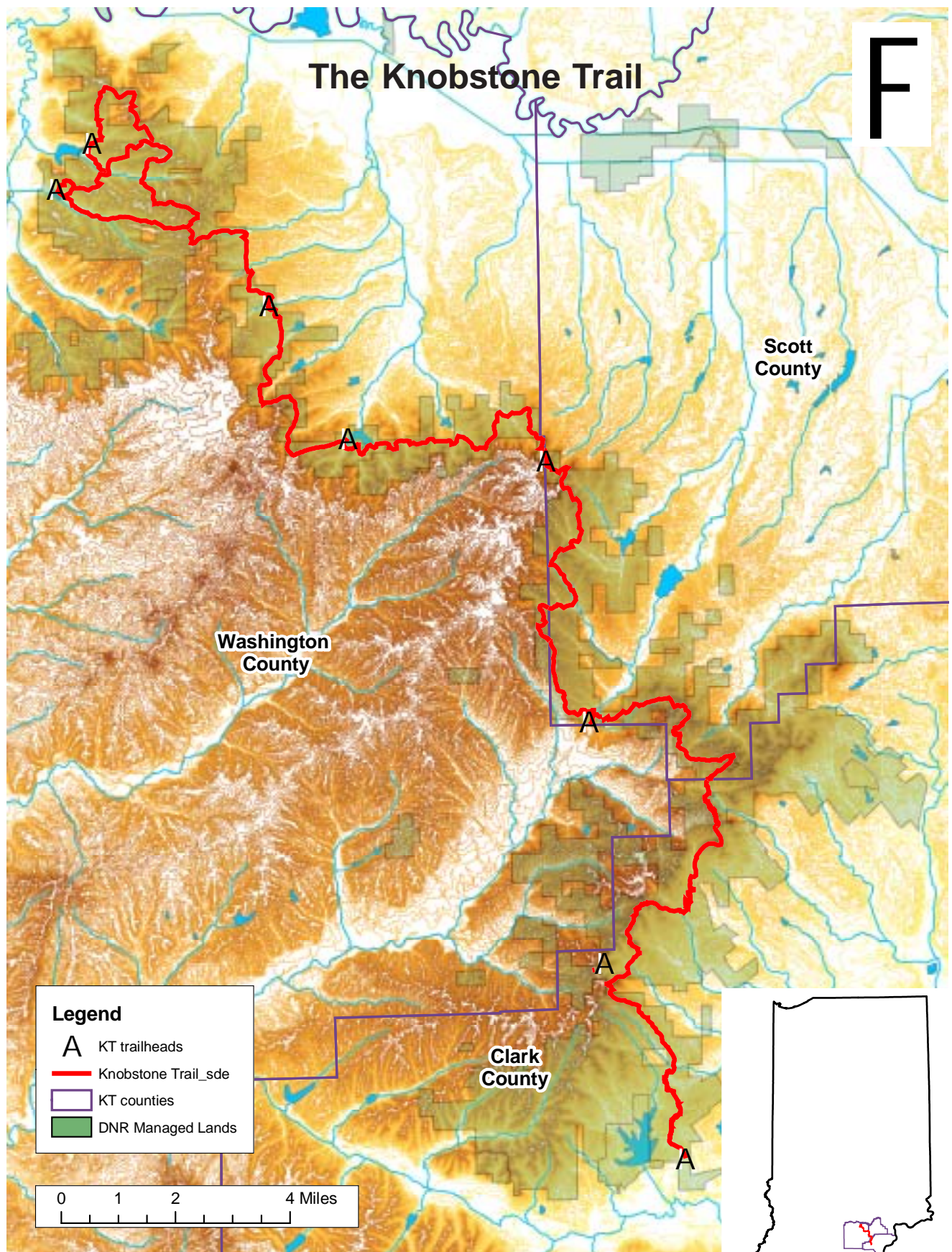


The Knobstone Trail is developed and managed for foot traffic only. Hikers will find themselves on a trail that traverses land with extreme topography distinguished by narrow, relatively flat-topped ridges. These are typical of the Knobstone Escarpment - a knobby slope between the Norman Upland and Scottsburg Lowland, two of southern Indiana's natural land regions. The Knobstone Escarpment is one of Indiana's most scenic areas, rising more than 300 feet above low-lying farmland in some areas as it snakes northward from near the Ohio River to just south of Martinsville.

All season trail use is allowed, but spring and fall are the most popular time to enjoy the unique features of the trail that is often compared to the Appalachian Trail. Hikers find that the KT is a rugged, challenging trail. It is managed and maintained at backcountry standards, and structures are limited to primitive steps on the trail. Because of the backcountry designation, primitive backpack camping is allowed along the trail only on public lands at least one mile away from all roads and trailheads, out of sight from the trail and lakes. This isolated atmosphere is what attracts people to the Knobstone Trail. By carrying out everything brought in, the trail retains its remote "away from it all" feeling.

The trail is off limits to horses, motorized vehicles, mountain bikes or any wheeled vehicle. However, it doesn't mean that the area is not used by others. Much of the KT is located on State Forest land that allows hunting and timber management. Hikers should be very aware during hunting season. Orange vests are recommended. Timber harvests may reroute trails since forest management is the primary use of the land. Hikers are guided by 4-foot brown posts with the letters "KT" in yellow near the top and by 3-inch by 6-inch white paint blazes, located near eye level on trees to the right of the trail.

People of all ages and skill levels will find something to love about the Knobstone Trail. From a simple short walk in from a trailhead to a multiple day backcountry camping get away, the KT is sure to reward everyone with an outdoor experience they won't forget. With 58 miles of winding trail, it is worth many visits to see it all.



National Trails

The American Discovery Trail (ADT) is the nation's first coast-to-coast, non-motorized trail. It is a new breed of national trail encompassing 6,800 miles of adventure, discovery and fun. It stretches from Delaware to California reaching across the United States, linking community to community. It provides the opportunity for the most adventurous to travel from coast to coast, truly discovering the heart of America. More importantly, it provides millions access to a trail system that improves quality of life and protects our natural resources. The ADT connects five national scenic, 10 national historic, and 23 national recreational trails; passes through urban centers like Cincinnati and San Francisco; leads to 14 national parks and 16 national forests; and visits 10,000 sites of historic, cultural, and natural significance. It is truly the backbone of the national trails system.

In Indiana, the American Discovery Trail offers a diverse, interesting, and challenging route for hikers, bikers, and other trail users as they cross Indiana on either the northern or the southern route of the ADT. The Northern Midwest Route of the ADT goes northwest from Richmond across the great Midwestern Corn Belt to the more industrialized region south of Gary. The Southern Midwest Route of the ADT follows along and just north of the Ohio River through the Southern Hills region, the only part of Indiana that the glaciers did not reach.

The American Discovery Trail connects to the following trails and destinations:

- Whitewater Valley Gorge National Recreation Trail
- Cardinal Greenway
- Pigeon Creek Greenway
- Morgan Ridge E/W Trail
- Knobstone Trail
- Two Lakes Trail
- Adventure Trail

Forests

- Clark State Forest
- Harrison-Crawford State Forest
- Hoosier National Forest

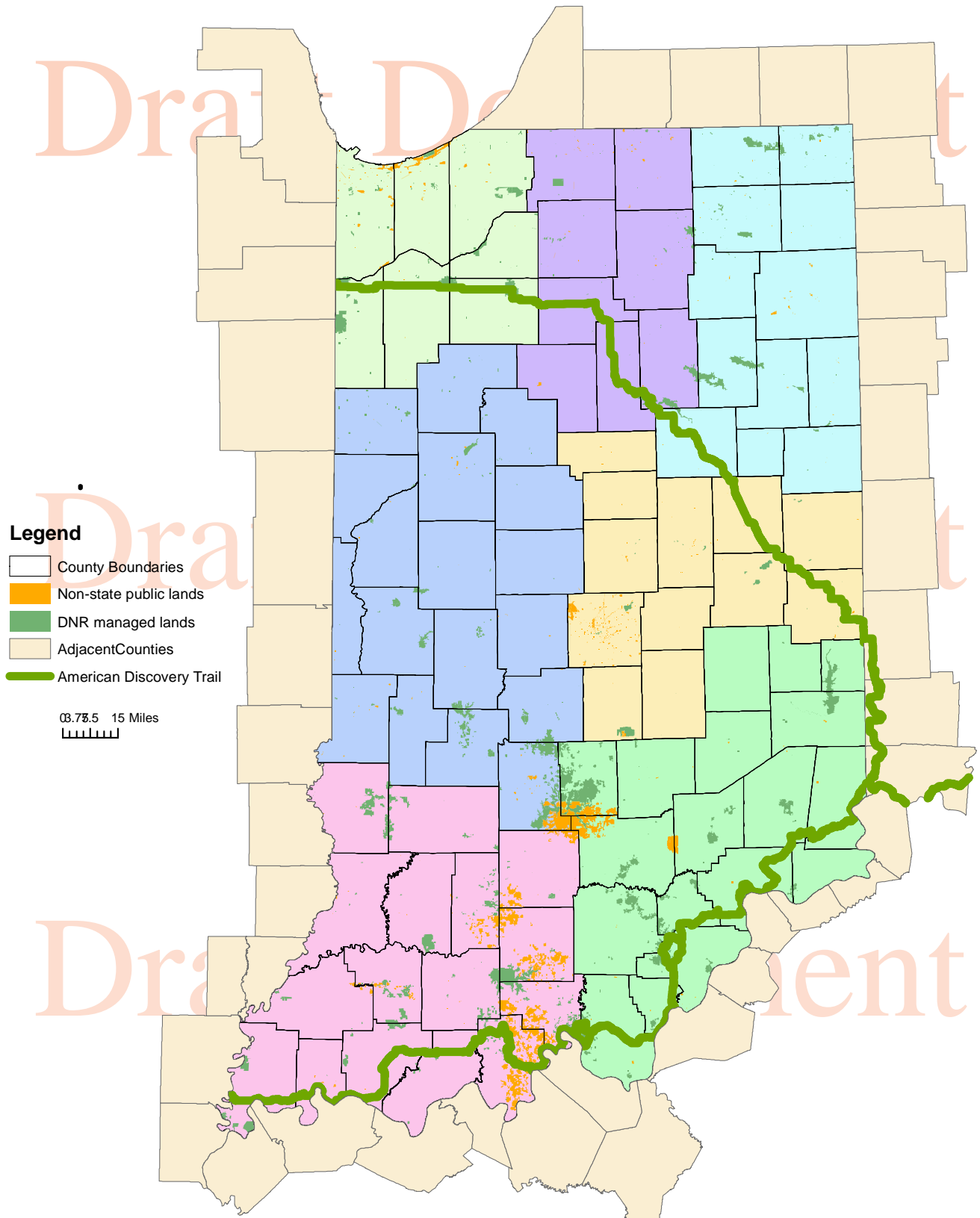
Parks

- Clifty Falls State Park
- Lincoln State Park
- Tippecanoe River State Park
- Falls of the Ohio State Park
- Burdette Park
- Scales Lake County Park

Points of Interest

- Holiday World Amusement Park
- Angel Mounds State Historic Site
- Memorial Parkway
- Frances Slocum State Recreation Area
- Lake Manitou
- Jasper-Pulaski State Fish and Wildlife Area
- LaSalle State Fish and Wildlife Area
- Col. Williams Jones State Historic Site
- Pigeon Roost State Historic Site
- Hill Forest State Historic Site
- Bass Lake State Beach
- Wyandotte Caves
- Hovey Lake State Fish and Wildlife Area

The American Discovery Trail Through Indiana



Nationally Designated Trails

National Recreation Trail designation is an honor given to those existing trails that have been nominated and meet the requirements for connecting people to local resources and improving their quality of life. The national trail designation is part of a continuing campaign to promote community partnerships and to foster innovative ways to encourage physical fitness. The National Trails System Act of 1968 encourages the Secretary of the Interior to recognize existing community trails that qualify as additions to the National Trails System. The Act promotes enjoyment and appreciation of trails and greater public access.

Central Canal Towpath Trail - This 6.2-mile trail follows a historic canal towpath dating back to 1836. It represents one of the few historic functioning canals and was designated as an American Water Landmark in 1971. In addition to its historical significance, the trail serves as a link to the Monon Rail-Trail and White River Trail and provides recreational opportunities including biking and cross-country skiing

The Monon Rail-Trail - This almost 10.5-mile rail-trail, one of the State's first rail-trails, connects the Indianapolis community by providing a link between area neighborhoods and popular downtown attractions including the Indianapolis Art Center and Indiana State Fair Grounds. The trail also provides recreation for people who enjoy such activities as inline skating and wildlife observation. In 2000, the trail was named one of the ten best examples of landscape architecture in Indiana by the American Society of Landscape Architects (ASLA).

The Monon Greenway - A 6-mile rail-trail and greenway that links Carmel's suburban neighborhoods with area businesses, the civic square and a planned Central Park. The greenway is a key part of a regional trail system and connects with the Monon Rail-Trail (a NRT) in Indianapolis. The trail has brought with it a sense of community and provides a peaceful setting in which residents can explore their surroundings while enjoying a walk or bike ride (*designated 2003*).

Pleasant Run Trail - This almost 10-mile trail connects Southeast Indianapolis neighborhoods to a variety of parks and recreational facilities. The trail runs along a creek and is a significant part of the Indianapolis greenways system. In addition to its natural resources, the trail also provides recreation for people who enjoy such activities as fishing and biking.

White River "Wapahani" Trail - Just under 5-miles, this trail is part of a 20-mile greenway that will stretch throughout the entire Indianapolis metropolitan area. It plays a vital role in connecting area neighborhoods with colleges, regional parks, and downtown locations. In addition to its connectivity, the trail also provides scenic views and recreation for people who enjoy activities like canoeing and rollerblading

Beyer Farm Trail - This trail promotes the educational, recreational, and health benefits of trails. It begins at the county hospital's campus and runs to Pike Lake Park, taking visitors along a boardwalk through a 60-acre urban wetland. This wetland supports a variety of flora and fauna, and the interpretive trail signs help trail users understand the significance of the habitat during





their walk or bike ride. As part of the larger Lake City Greenway project, the trail will serve as a key community connector to the City of Warsaw and the Town of Winona Lake.

Cardinal Greenway - A 30-mile rail-trail that spans 5 counties and 3 major cities. It is the state's longest linear park and serves all of East-Central Indiana. The multi-use greenway is part of a 60-mile project that provides a key community connection to area schools, parks, and local cultural and historic resources. Trail users enjoy a number of activities including jogging, biking and wildlife viewing. This greenway is a fine example of what is possible through volunteers and successful partnerships.

The Cattail Trail - This four-mile urban trail and greenway (currently under construction) provides West Lafayette residents with a connection to the Northwest Greenway Trail, Celery Bog Nature Area, and Purdue University's Pickett Park. In addition to its natural features, the trail allows for recreational opportunities including biking, skiing, and skateboarding.

Delphi Historic Trails - Running more than 7 miles throughout the city, this multi-use trail system provides a unique setting for hiking, biking, and canoeing. Trails have been integrated into this historic community using canal towpaths, stream

corridors, and abandoned railroads. The trails also include a section of the Wabash Heritage Trail, which is envisioned to follow along the Wabash River and span 19 counties. This trail system is a fine example of what is possible through volunteers and a diverse partnership.

Pigeon Creek Greenway Passage - Located in Vanderburgh County, this 3-mile trail and greenway is part of a planned 42-mile greenway trail system that will encircle the county and serve the entire city of Evansville. Bicyclists, hikers, and kayakers are just some of the groups who enjoy what this trail has to offer in an urban setting. The project has inspired thoughts of a multi-county regional trail plan in the future.

The Northwest Greenway - Features a five-mile trail (currently under construction) that connects with a local trail system and on-road bicycle lanes, providing West Lafayette residents with a variety of recreational opportunities as well as a means of alternative transportation to locations throughout the city, including Purdue University. In addition to its natural features, the trail provides recreational opportunities including biking, skiing, and wildlife observation.

Draft Document

Draft Document

Draft Document

Chapter 3 Value Added Features of Trails

In the late 1980's the value of trails in the United States was beginning to be recognized on a national level. As early as 1985, President Reagan appointed a bipartisan commission to look ahead for a generation and determine how to meet the nation's needs for outdoor activities. That commission's report, *Americans and the Outdoors* (President's Commission on Americans Outdoors, 1987), recognized the increased problems and pressures on the outdoors. As a solution, the commission offered the following recommendation.

"Our communities can create a network of greenways across the USA... We can tie this country together with threads of green that everywhere grant us access to the natural world. Rivers and streams are the most obvious corridors, offering trails on the shores and boating at mid-channel. They could link open areas already existing as national and state parks, grasslands, forests, lakes, and reservoirs, the entire network winding through both rural and urban populations. Thousands of miles of abandoned rail lines should become hiking, biking and bridle paths. Utility rights-of-way could share their open space not only with hikers and cyclists but also with wildlife. Citizens and landowners, both individual and corporate, can look for opportunities to establish and maintain volunteer labor. Imagine every person in the US being within easy walking distance of a greenway that could lead around the entire nation. It can be done if we act soon."

Fewer things in the 21st Century development industry make better sense than combining community infrastructure along with quality of life amenities, especially those that accommodate pedestrian and bikeway needs of citizens demanding better health and fitness opportunities in their communities. Entrepreneurs and housing developments located along a network of linear green space corridors invite, entertain and engage citizens in an atmosphere that establishes a quality of life that will make Indiana a leader on the American landscape.

"Green Infrastructure" was coined to describe our Nation's natural life support system - an interconnected network of protected land and water that supports native species, maintains natural ecological processes, sustains air and water resources and contributes to the health and



quality of life for America's communities and people. Trails are a perfect example of green infrastructure that adds both quantifiable and non-quantifiable value to a community. Combining green infrastructure with built infrastructure under and over the ground creates a corridor system that provides countless benefits for those who live close to a trail, those who travel to use and enjoy trails and those who derive an economic benefit from a trail.

On the surface these corridors serve as greenway or bikeway trails emphasizing the human component tied directly to the health of local populations. Functionally, these corridors can also serve as emergency utility access roads. Utilizing existing, though no longer used, corridors can recreate opportunities for energy, information and opportunity to travel and flow to every town and city along these corridors. Consequently, valuable transit and utility corridors are not lost. They just evolve into a trail system that could have, just a few feet below the user's feet, an infrastructure of pipes and cables that will accommodate the flow of resources, such as wastewater and fresh water, and commerce.

This statewide trails planning effort should address the needs and create a venue for citizens to become more active. As people grow more accustomed to having access to a developed trail network they will continue to recognize the value that such systems add locally and throughout Indiana.

Trails and Economic Development

Trails and greenways provide multiple benefits. Their primary value, of course, is the enjoyment they bring to people who use them. But they have many other advantages.

Because trails may attract people to rural or remote parts of the state, they have significant potential to serve as engines of economic development. Even new trails in an already developed area may heighten economic activity in the vicinity of the trail.



Here are some of the ways in which trails may spur economic development:

- They may increase property values near the trails.
- They may lead to greater tourism along the routes people take to get to the trails or in the region where the trails are.
- They may lead to new restaurants, grocery stores, bike shops, motels, camping areas, and suppliers/renters/repairers of recreation equipment, or they may increase the traffic these businesses get.

Trails almost always have a positive economic influence. In 1992, the National Park Service studied three multi-purpose trails in California, Florida, and Iowa. The annual combined economic impact of these three trails was found to be \$1.5 million.

Others have gauged the economic effects of trails and have come up with dramatic results.

- In early 1996, the Company of Pilgrims surveyed 6,000 households represented at the Indianapolis Home Show. One question, directed to those considering buying or building a house in the near future, asked people about recreation. The results: 55% wanted nearby playgrounds, 73% wanted nearby basketball or tennis courts, and 83% wanted nearby hiking or biking trails.
- In 2001, PriceWaterhouseCoopers determined that a 201-mile section of a proposed trans-Canada trail system would create 170 jobs and increase the income in that province permanently by \$7 million U.S.
- The Little Miami Scenic Trail in Ohio has 150,000 trail users each year, who spend an average of about \$15 per visit on food, beverages, and transportation to the trail.
- New trails have led to the economic revitalization of communities as diverse as Leadville, Colorado; Rockmart, Georgia; and Milford, Delaware.
- In 2002, the National Association of Realtors and the National Association of Home Buyers conducted a joint survey. In a list of eighteen community amenities, trails were chosen as the second most important.
- Home lots next to trails sell faster and at a 9 percent premium than homes do farther away.

Increasingly communities are realizing the economic aspects of quality-of-life issues. The ability of residents and visitors alike to 'escape' to a trail for hiking, biking, jogging, etc. is no longer seen as a luxury but as a vital component

of what makes a particular location attractive and livable.

Trails are rarely created to increase a region's economic vitality. But they almost always have that result.

- In 2004, the Indiana Chamber of Commerce named Muncie Indiana Community of the Year because of the city's development around its downtown – including \$12 million (mostly in federal dollars) devoted to hiking and biking trails accessible near the downtown.
- A 2001 study of the Rivergreenway Trail in Fort Wayne revealed that the average user of that trail spent \$1,350 a year in connection with using that trail. The same study showed that half of those who used the trail fell into two categories: industry/technology/trades and business/clerical/management.
- Bloomington, Indiana recently acquired a rail line that the city will convert into a paved urban trail in order to revitalize the arts district and, with it, create a more vibrant downtown.
- In February 2006, a software manufacturer from Muncie announced that it was moving its operations to Yorktown. Even before the move, the company had drawn up plans to provide scenic amenities that it knew would be of value to its employees: a park and a walking trail.
- The Monon Greenways Trail that stretches sixteen miles from Indianapolis to Carmel is a model combination of the rails-to-trails concept with economic development. Bike shops and cafes line parts of the trail. The trail goes through the artsy community of Broad Ripple through open country into the sophisticated environs of Carmel with easy access to parks, a shopping center, and a farmers market. As a local television station reported, "There was a

time that the trail met with some resistance from people who lived nearby. They thought it would lower their property value. Now a lot of them are using it as an attribute in their real estate listings."

In June 2006, the Monon Trail celebrated its 10th anniversary. The trail, with 1.2 million visits a year, is so popular that developers are building thousands of high-end condominiums and townhouses along or near the trail. Above the northernmost point of the trail, two housing subdivisions totaling 1,000 homes are planning to make the trail part of their developments. Town planner Kevin Buchheit explained: "Everyone wants to be on the Monon."

Two shopkeepers near a new Indianapolis trail summed it up. Over 4,000 people now use this trail every day, and at peak hours more than 700 walk on one three-mile stretch. A deli owner near the trail observed, "A lot of people are coming in here that have never been here before." The owner of a local store likewise commented, "The trail has helped to put our name at the front of people's minds."

Trails as Alternative Transportation

Providing for alternative transportation is often touted as one of many trail benefits. Before looking at the role trails can play in providing alternative transportation it may be helpful to note how bicycle and pedestrian commuting has typically been measured in the past. Commuting is often mistakenly thought of as simply the journey to work. The latest Journey to Work Survey by the U.S. Census Bureau in 2000 found 3.3% of workers rode bicycles or walked to work. However, the National Household Travel Survey in 2001 reported that journey to work trips only comprise 15% of all trips. In other words, 85% of all travel is trips other than to and from work. Accordingly, it makes sense to consider all types of trips when assessing the level of commuting done via trail.

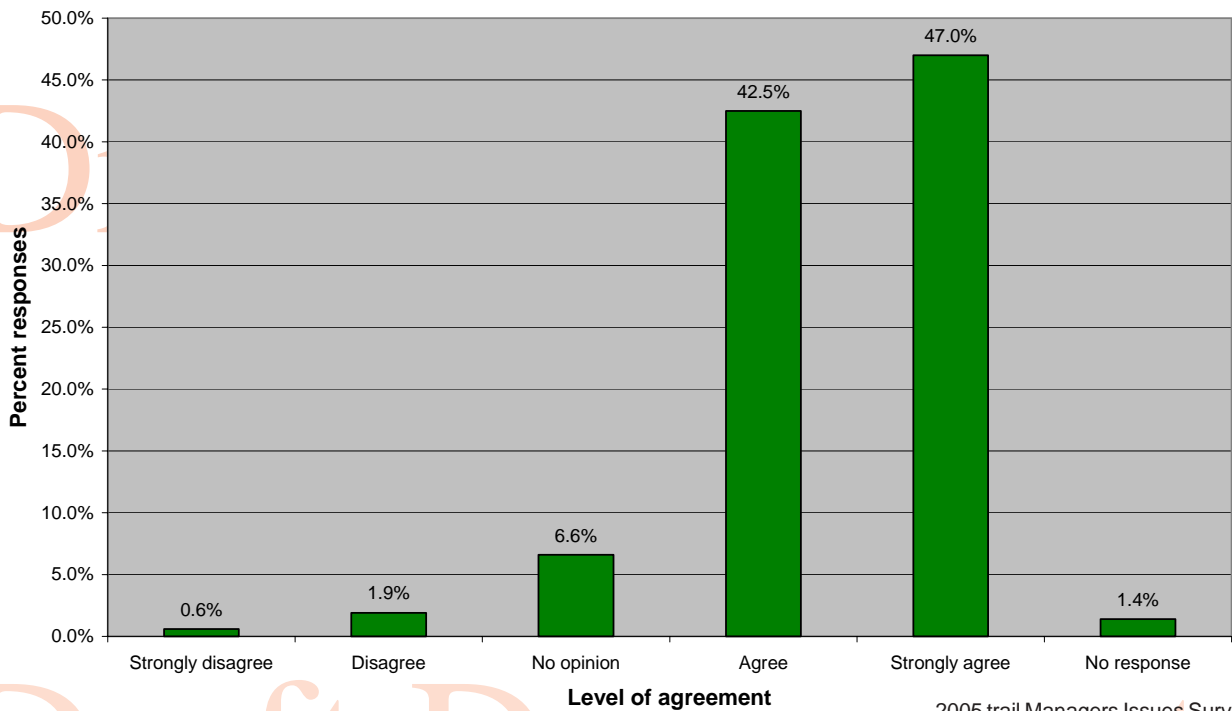
Although further research is necessary, initial studies show significant use of Indiana trails for alternative transportation. In January 2002, The Indiana Department of Transportation (INDOT) released the Indiana Trails Study, the most comprehensive evaluation of trails in the state to date. A summary of the study is available on INDOT's website at <http://www.state.in.us/dot/projects/trails/index.html>. This study of six Indiana

trails found that 5% of visits to the Monon Trail in Indianapolis were for the main purpose of commuting. Another 15% of Monon Trail visits were for a secondary purpose of commuting or running errands. In other words, approximately 20% of trips resulted in some type of commuting. With a monthly visit count of 25,000 on the Monon Trail in Indianapolis, this would translate to 5000 commuting trips per month. Since 2002, the Monon Trail has been extended five miles to the north through Carmel and 3 miles to the south near downtown Indianapolis. Also, the Fall Creek Trail has since been connected to Monon Trail. These extensions and connections have greatly increased the potential for commuting on the Monon Trail.

There are several factors that could influence the level of commuting done via trails. Provision of sidewalks, bike lanes and other street related amenities is important for bicyclists and pedestrians who are trying to safely access a trail. Trail connections to transit and bike racks on buses and trains could encourage use of trails to access the transit stop or station. Destination amenities such as "bikeports", bicycle parking and shower/locker facilities also make it easier to choose bicycling

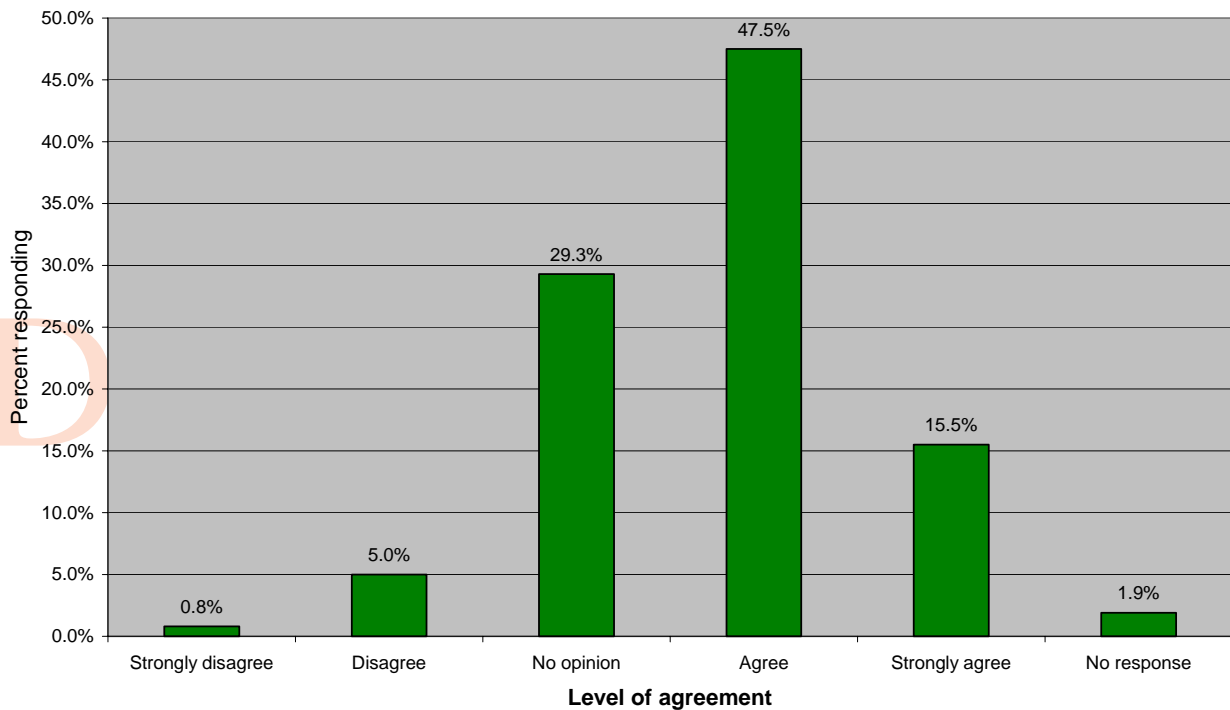


Roadway improvements that incorporate bicycle/pedestrian facilities are important for trail expansion and providing modes of alternative transportation



2005 trail Managers Issues Survey

There needs to be a coordinated effort between trail development and public transit services to provide viable transportation alternatives



2005 trail Managers Issues Survey

and walking to work. In addition, incentives for alternative transportation commuters and disincentives for auto commuters could encourage more commuters to hit the trail. Conversely, limiting speed or allowing only daylight use on trails could reduce the level of trail commuting.

INDOT became increasingly attuned to the needs of cyclists and pedestrians in the mid-1990s, adding the Indiana Bicycle and Pedestrian Facility Planning and Development Plan to the statewide multimodal transportation plan. Now more and more INDOT projects feature improvements unheard of ten years ago. INDOT incorporates sidewalks, separated multi-use paths, concrete pedestrian underpasses and widened shoulders in many of its projects to accommodate pedestrians and bicyclists. Secure and convenient bicycle parking allows employees and visitors to state offices to exercise their travel options. In 2003 INDOT and the Department of Administration purchased and installed bicycle parking racks at the Indiana Government Center.

Nationwide, initiatives supporting sustainable development, smart growth and livable communities are fueling interest in bicycle and pedestrian travel. A renewed emphasis on walking and the need for physical activity makes sidewalks mandatory in many new residential developments. More bridges in urban areas are designed with walkways to facilitate pedestrians. Cantilevered walkways can be added when bridges are reconstructed. Curb ramps in cities and small towns improve access for people with disabilities and the elderly, wheelchairs and baby strollers. Pedestrian overpasses will soon permit safer



crossing of major roads in communities like Bloomington, Fort Wayne and Evansville. With the growth in bicycling, the need for bike racks on buses has also grown. Hammond, Fort Wayne, Lafayette, Bloomington, Columbus, Evansville, Muncie, Indianapolis and the Louisville area transit system mount bike racks on their buses. Tunnels provide grade-separated access for pedestrian and bicycle use in Columbus, Schererville, Merrillville, Carmel, Delphi, Portage and Indianapolis. When new highway bridges were built across the Wabash River in Lafayette and the White River in Indianapolis, the old bridges were converted to accommodate pedestrians.

Improvements that encourage bicycle and pedestrian commuting are supported by the 2003 Surface Transportation Policy Project. The Project makes note of a finding by the National Household Travel Survey in 2001 that 61% of trips under a half mile distance are made in a vehicle. On the other hand, the Surface Transportation Policy Project reports that a national poll in 2003 found 66% of Americans chose public transportation and walkable communities, rather than new roads, as the best long term solution to traffic congestion. The Project also found that 74% of Americans want their children to be able to walk to school safely. So, from an alternative transportation perspective, it appears there is strong public support to continue to invest in trails and related facilities.



Trails and Tourism

Tourism in Indiana is big business. Annually, the tourism industry brings in approximately \$6.7 billion in spending from 58 million leisure visitors—people who travel at least 50 miles to reach one of Indiana's many destinations (this figure does not include the hundreds of thousands of people who travel as part of conventions or on business). Tourism contributes to a diversified economic base, and visitor spending creates nearly 100,000 tourism-related jobs each year. The effects of visitor spending within local economies reach not only traditional tourism entities, but other businesses as well, including gas stations, restaurants and grocery stores. Over the past several years, Indiana's leisure market has grown at a rate higher than the national average.

Outdoor recreation is one of Indiana's major forms of tourist attraction. Brown County State Park is the nation's most visited state park. Sites like the Indiana Dunes National Lakeshore are well known tourist attractions. According to Strategic Marketing & Research, 54.9 percent of leisure travelers to the state enjoy scenic beauty while visiting. Tourists visit lakes, rivers and other natural features 40.7 percent of the time. Nationally, top leisure activities include outdoor at 12 percent (3rd highest), rural sightseeing at 11 percent (4th highest) and visiting a national/state park at 8 percent.

Trails are an increasingly important aspect of outdoor recreation industry. In 2004, the Office of Tourism awarded \$75,000 to the National Road Heritage Trail (NRHT), Inc and Indiana Trails Fund to help create a trail development guide. The resulting 9-volume NRHT Development Guide is an important resource for the state, the 8 counties, the 30 communities and countless citizens' groups along the proposed route of the 150-mile National Road Heritage Trail. The guide provides the background information and context with which to launch or modify greenways development plans in order to create a continuous, interconnected network of bicycle and pedestrian facilities across the width of the state, including equestrian facilities for much of the route. Other examples of the evolving connection between tourism and trails include the recent winter hikes in Brown County State park organized and promoted by the local Convention and Visitors Bureau and the feature article on the American Discovery Trail in the 2006 Indiana Travel Guide.

The value of tourism goes beyond the jobs it creates and the dollars that visitors spend staying in Indiana hotels, dining in restaurants and visiting attractions. Tourism has a direct impact on the quality of life for Hoosiers by creating stronger communities and offering unique experiences. The driving motivators that influence visitor travel are often the same factors considered by Indiana residents and potential residents when choosing where to live.



Trails as Co-located Infrastructure

There is another opportunity that future trail developers could utilize to implement trail networks on a state wide level. Co-locating trails and infrastructure in the same corridor could serve a dual purpose. It could combine utility corridors with trail. This concept could be expanded to connect towns throughout rural Indiana for sharing services such as waste water treatment. A facility located in one community could serve several other cities and towns in the region by developing a collector system of infrastructures under old rail beds and road right of ways.

Many towns were founded originally along these rail lines and they could be used to revitalize smaller communities throughout Indiana. Waste water facilities in one community and fresh water facilities in another could support an entire region at a fraction of the cost communities now spend having to development and maintain there own facilities.

Reducing inefficiencies associated with communities duplicating the same services could be a significant cost-saving measure at the local level. Reconnecting municipal infrastructures through a corridor along the old rail or other utility corridors could set the tone for Indiana communities to attract new business developments. Easy access to fresh water supply, sanitary disposal, fuel, high speed data connections and other resources would be augmented by a higher quality of life for prospective employees.

For example, in 1989, a lift station on the north side of Marion County failed, dumping millions of



gallons of raw sewage into Williams Creek and the White River and resulted in a massive fish kill. That incident prompted the Environmental Protection Agency to require a new interceptor sewer system be built to serve the entire north & central regions of Marion County. This needed project had been postponed for years because there were no funds to build it.

Concurrently, the Indianapolis Department of Metropolitan Development was negotiating for 10.5 miles of the old Monon rail corridor that ran through the north central center of Marion County. Within days of the corridor being secured by the city, a quick engineering study was completed. A 48-inch sewer main was co-located under the old Monon rail bed in record time and for a fraction of the cost of locating the main sewer line under high traffic streets. The list of other co-located utilities along old rail corridors and greenways has grown throughout Indiana and includes fiber optic cable, cable TV, sewer lines, water, gas lines, high speed internet, power lines and live steam from the solid waste recycling burn facility.

As manufacturing of alternative fuels expands in Indiana there are growing opportunities to utilize this network of facilities to further develop trails. Trail systems could be built over and alongside an infrastructure of pipes and cables that accommodate the flow of resources and commerce. Pumping corn slurry from grain elevators and Indiana farms to ethanol refineries and on to waiting markets will require expanding the network of existing utility corridors beyond those currently available. Additional above and below ground space for trails and infrastructure could be created based on the model of the railroads 150 years ago that launched Indiana and the United States into world leadership as it towered over the 20th century.

With all of these utility corridor opportunities availing themselves to the development of trails, careful planning is necessary to make sure the trails that are developed will serve their respective populations effectively. Building trails for the sake of trails is ideal. However in these days of reduced government spending and concern for government waste, building trails near populations that will utilize the networks to their fullest extent will provide the biggest return for the trail dollars spent.

Trails Supporting the Indiana Strategic Initiative in Biofuel and Agriculture



Indiana Health By the Numbers

In recent decades the Centers for Disease Control and Prevention (CDC) have reported dramatic increases in the number of Americans who are overweight or obese. Both adults and children across the country and in the State of Indiana have recorded drastic negative changes in health indicators that contribute to a host of preventable chronic illnesses. Those illnesses have a profound effect on quality and length of life and cost individuals, businesses, and the State billions of dollars each year in health care expenditures. Those often preventable conditions, positively impacted by physical activity are:

- Hypertension
- Dyslipidemia (for example, high total cholesterol or high levels of triglycerides)
- Type 2 diabetes
- Coronary heart disease
- Stroke
- Gallbladder disease
- Osteoarthritis
- Sleep apnea and respiratory problems
- Some cancers (endometrial, breast and colon)

Overweight & Obesity Trends

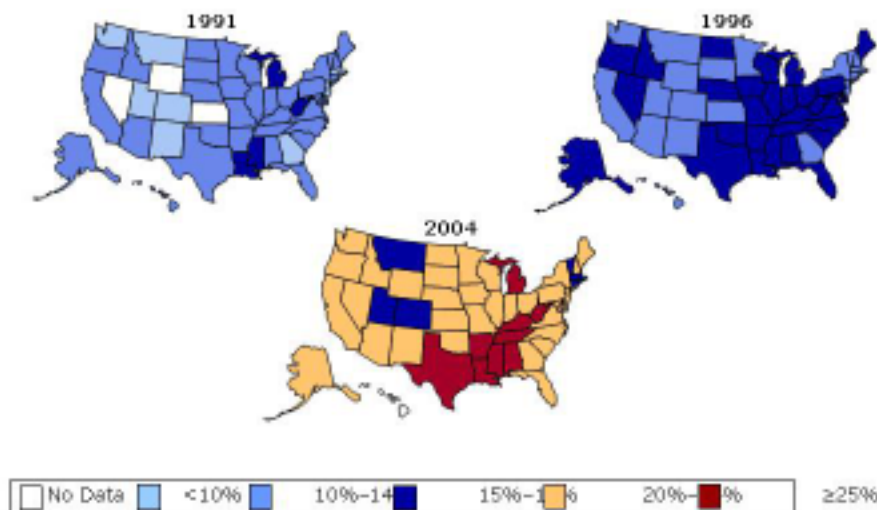
In recent decades there have been large increases in the incidence of overweight and obesity in the United States and the State of Indiana. Using the Body Mass Index (BMI), a number based solely on a formula using height and weight, the prevalence of overweight, those with a BMI of 25.0-29.9, and obesity, those with a BMI over 30, has grown significantly.

In 2002, 37.0 percent of Americans and 37.2 percent of Hoosiers were considered overweight while 22.1 percent of Americans and 24.1 percent of Hoosiers were considered obese. Over 60 percent of Hoosiers are considered overweight or obese, a significant increase from 46 percent in 1990. For children, between 2003 and 2005 the percentage of overweight students in Indiana rose from 11.5 percent to 15.0 percent.

Obesity Trends* Among U.S. Adults

BRFSS, 1991, 1996, 2004

(*BMI ≥ 30 , or about 30 lbs overweight for 5'4" person)



According to the U.S. Department of Health and Human Services report *Physical Activity Fundamental to Preventing Disease*,

“Encouraging more activity can be as simple as establishing walking programs at schools, work sites and in the community. Some communities have an existing infrastructure that supports physical activity, such as sidewalks and bicycle trails, and worksites, schools, and shopping areas in close proximity to residential areas. In many other areas, such community amenities need to be developed to foster walking, cycling, and other types of exercise as a regular part of daily activity.”

U.S. Department of Health and Human Services. Physical activity fundamental to preventing disease 2002 June 20. Available from URL: <http://aspe.hhs.gov/health/reports/physicalactivity/>

Physical Activity

Physical activity directly impacts the incidence of obesity and related conditions that effect health and quality of life. Simply engaging in 30 minutes of moderate physical activity at least five days each week is sufficient to result in health benefits. Moderate physical activity includes walking, hiking and other activities easily accessible in park and recreation areas statewide.

In 2004, 22.8 percent of Americans and 25.3 percent of Hoosiers reported no physical activity in the past month. Only 46 percent of Hoosiers engage in a sufficient amount of physical activity. The statistics for children are also alarming. In addition, to the startling overweight numbers, only 28.2 percent of ninth graders in Indiana take part in daily physical education instruction, which effects lifelong health habits.

The CDC's *Guide to Community Preventive Services* recommends creating or improving access to trails and other venues as a way to address this problem. These assets, combined with effective community educational outreach efforts inspire increasing physical activity in the population. CDC studies have shown that this strategy can increase the number of individuals who engage in the recommended amount of physical activity by 25 percent.

Financial impact of Health

The financial impact of physical inactivity is staggering. Recent data from Active Living Leadership, at San Diego State University, estimates the total cost of physical inactivity in the state of Indiana to be almost \$7 billion annually, with most of this burden coming in the form of lost productivity. It is also estimated that if five percent of the Indiana population became physically active, the cost of this burden would be reduced by over \$300 million each year. If Indiana improved access to trails for all of its citizens, Hoosiers could save hundreds of millions of dollars annually. Additionally, trails are great places for daily contact with other people. This enhances the mental health of the population further impacting the health related bottom line.

The role of recreation and trails in maintaining a healthy lifestyle

We need to re-create Indiana with recreation.

Over the years as Indiana's population has become more sedentary. Food portions have become super-sized and we have seen the health of Indiana citizens plummet. Indiana is one of the top states for obesity and its related diseases which include diabetes, heart disease, stroke, cancer and arthritis. What can we do about it? Recreate! Where can we recreate? Trails!

Public health physicians have noted that for many years, it's easier to motivate people to exercise than to get them to stop smoking or change eating habits. Wagging fingers and "don't eat this" or "don't smoke" gives a grim image. But when promoting walking, running, hiking, biking and more, it's easy to extol the joy of a healthy life-style.

So how do we encourage Indiana citizens to get In Shape?

One thing they need is infrastructure. One of the best exercises, especially for a previously sedentary person is simple walking. Studies have shown that when persuading people to walk there are three requirements - they need a place that is safe, that is convenient and that is attractive. Such are our state parks, state and local lands and public trails.



Walking on a broken sidewalk past parking lots and traffic does not encourage our citizens to get out and exercise. But when spring peeks around the window, migrating birds start to sing and ephemeral wildflowers color the ground, people will naturally want an opportunity to visit the natural lands of Indiana and celebrate the cycle of the seasons. They just want to have an opportunity to get outside.

Too many children are more familiar with the world wide web and have not experienced the sparkle of a spiders web covered with dew on a summer morning. How can we expect the next generation to protect the land or to even care about Indiana if all they know is the inside of a fast food restaurant and the entertainment on a screen? Children need to know the natural environment of the Hoosier state so they will choose to live here and care for the land of Indiana.

The benefits from exercise on our public lands goes beyond physical health. Nature has a calming effect on many of the symptoms of an increasingly crowded world. Neighborhoods with trees have less vandalism and graffiti. Surgical patients who look out on trees and nature heal faster. Long distance athletes can get renewal by running through a woodlands where the oxygen concentration is higher.

Trails also promote economic health. In today's information economy everything is connected. People and businesses can often locate wherever they want. And the draw to those entrepreneurial people that drive the economy is the quality of life in a state and town. When studies are done to determine the most livable towns of America they always look at much the same things - clean air, clean water, good parks and good schools. The Indiana State Parks - from the sands of the Indiana Dunes to the waters of Clifty Falls - are a major

Adapted from an essay contributed by:
Helen Steussy, M.D. Chairman,
Healthy Communities of Henry County
www.hchcin.org

selling point for bringing people to Indiana. Thriving state and local park systems can attract entrepreneurs, retirees and families looking for a place to live and raise their kids. All these people may appreciate the sound of a thrush in the woodlands or the sight of a Monarch butterfly hovering over a field of wildflowers. Trails can be the thread that ties it all together

Trails also create opportunities for public art located on such places as the back side of warehouses building. Murals depicting local cultural historic events could add an added educational benefit. Including venues for local artists, youth groups and schools allows them to communicate ideas of nature and community.

Trails and greenways protect our environmental health. Clean air and clean water are essential to a healthy life. The forests and grasslands of public lands help clean the rainfall and return it to the underlying aquifers and streams. The greenery produces that miracle of photosynthesis that clears the air of toxins and produces fresh, clean oxygen. While the parks provide a haven for migrating birds and butterflies, trails and greenways provide the corridors for them to travel by.

And don't forget social health. In today's fast paced society we need time and a place for social interactions. There is a need for third spaces in our world - places that are not work and not home where people can gather away from the noise and frantic pace of the city. When we in New Castle built a community playground - partly as an effort to battle childhood obesity - our goal was not for the children to go home to their own backyards to swing on a swing set alone. We envisioned a place where children of all ages and backgrounds could gather and enjoy the thrill of active play in a vibrant setting.

The Indiana trail network can be an integral part of improving the health of Hoosiers in every way - their physical health as well as mental, economic, environmental and social. If we want to get In Shape Indiana our trail networks and parks are an essential ingredient to the process. Our activities can recreate Indiana and lead the way to a healthy, vibrant place for Hoosiers to live and cherish.



In 2005 Governor Mitch Daniels launched the INShape Indiana initiative in response to growing health concerns related to the lifestyles of Hoosiers. Physical inactivity, poor nutrition and tobacco use are the three primary factors leading to a host of chronic diseases that affect the health, quality of life and financial stability of individuals, organizations and the State of Indiana.

The INShape Indiana initiative aims to encourage all Hoosiers to move more, eat better and give up smoking. The spirit of INShape Indiana is being implemented across each agency of state government and is joined in partnership by organizations, facilities and events with similar goals statewide.

Indiana ranks at or near the bottom in every negative health indicator, including physical inactivity. An effective trails system is vital to Governor Daniels' vision for a healthier Indiana. Regular physical activity comes naturally while using a trail for walking or bicycling. Ease of access to recreational infrastructure such as parks and trail systems in the State of Indiana is a large component to the activity level of citizens.

A plan for the statewide development of trails helps to improve access to trails across the state by encouraging connections across varied communities. Americans who live or work near well de-

Draft Document

Draft Document

Draft Document

Chapter 4 Indiana Trail Providers

Lead Agencies and Organizations

In Indiana, trails are an important component of the overall outdoor recreation system. There are many agencies working together to manage and develop trails. The trails these entities provide of with various lengths. They run through different environments and accommodate a multitude of outdoor activities from hiking and biking to snowmobiling and horseback riding. Trails are managed and maintained by a variety of organizations and groups. Trails are most often found in all types of parks. More recently, trails are being planned and developed to link community resources and other places of interest. In many cases, the trail itself is being created and marketed as a destination. As stated earlier, this plan intends to help coordinate varied entities and develop a statewide trail network that capitalizes on the opportunities for public and private partnerships.

Trail use in Indiana is growing. The most popular outdoor recreation is walking followed closely by biking. Other popular activities conducive to using trails include hiking, jogging, photography and bird watching. As technology advances, activities like mountain biking, inline skating, and ATV riding are increasing in popularity, placing greater demands on trail providers to increase trail opportunities and reduce conflicts between trail users. The following sections describe the various entities' roles in creating and maintaining trails for Indiana's citizens.

Indiana Department of Natural Resources

Trails, their supply and demand, continues to be a controversial topic across the country, and Indiana is a reflection of these issues. The Indiana Department of Natural Resources' Division of Outdoor Recreation provides trails on the ground as well as technical support and financial support through grants.

All of Indiana's state parks, recreation areas and forests contain hiking trails and walking paths. Many of Indiana's nature preserves have walking paths. Several properties provide horseback, touring bike and mountain bike trails. Joint

ventures with the Indiana Mountain Bike Association are producing even more mountain bike opportunities in Indiana's State Parks. Indiana's longest hiking trail, the 58 mile Knobstone Trail, is managed by the Division of Outdoor Recreation.

In 2003, Indiana opened the first state owned off-highway vehicle park. Redbird State Riding Area is a 1000 acre property on formerly mined lands that provides over 30 miles of trail for 4-wheel drive vehicles, motor bikes, ATV's and other off-highway vehicles. This property is jointly managed by a non-profit corporation and the Division of Outdoor Recreation.

In northern Indiana, five snowmobile trails are maintained through cooperative agreements with local snowmobile clubs. The local clubs map out and maintain the trails while DNR provides technical assistance. The snowmobile program and trails are self-supporting with funds via snowmobile registration fees.



The Trails Advisory Board

The acceptance of trails as an integral part of a community's infrastructure has significantly improved in recent years, but in a few areas trail development continues to be a controversial issue. Federal, state, and local government agencies and private organizations across the state seek to improve public trail supply to meet the demand. At the state level, DNR's Division of Outdoor Recreation works with Indiana's Trails Advisory Board and other organizations to accomplish that goal.

Established in 1994, the Trails Advisory Board consists of 14 citizen volunteers that represent a variety of trail interests:

- all terrain vehicle users
- pedestrians
- bicyclists
- snowmobilers
- environmental groups
- soil and water conservation districts
- equestrians
- sportswomen and sportsmen
- four-wheel drive vehicle users
- trail support groups
- local park and recreation agencies
- users with disabilities
- off-road motorcyclists
- water trail users
- mountain bikers
- hikers

The Trails Advisory Board serves as the Department of Natural Resources' advisor on trail related issues and was responsible for developing *Indiana Trails 2000*, a state trails plan completed in 1996 that was developed by trail users for trail providers. *Indiana Trails 2000* aimed to provide direction for trail development at the local, regional, and state levels.

Indiana Department of Transportation

The Indiana Department of Transportation (INDOT) in recent years has taken a much more active stance in developing trails in Indiana. Previously, its main focus was on roads. Recently, INDOT has created a position for a Greenways coordinator



and is working to develop a budget that will put trail miles on the ground. INDOT has also pledged to offer technical assistance to outside entities that are developing trails, and to be a resource for agencies that are incorporating trails in their roadway designs.

In 2000, INDOT funded one of the first studies to examine and compare trails in Indiana. The Indiana Trails Study provided a reconnaissance study of the use levels, user characteristics, management practices, economic factors and impacts to adjacent properties for selected trails in Indiana. Trails in Portage, Indianapolis, Goshen, Ft. Wayne, Muncie and Greenfield were examined. This study was immensely popular as it was the first of its kind in Indiana. Efforts are currently underway to repeat this study and expand it to cover more trails.

Federal Trail Providers

National Park Service

RIVERS, TRAILS AND CONSERVATION ASSISTANCE (RTCA) implements the natural resource conservation and outdoor recreation mission of the National Park Service in communities across the United States by helping to create local, regional and state networks of parks, rivers, trails, greenways and open space in collaboration with community partners. In Indiana, RTCA has been actively engaged with state agencies, local governments, organizations and citizens since 1992 on a wide variety of projects. For more information on this program log onto www.nps.gov/rtca or to request assistance for your community/project, contact:

Rory Robinson, IN Projects Manager, NPS Rivers,
Trails and Conservation Assistance
2179 Everett Road, Peninsula, OH 44264, (330)
657-2951, 2955 FAX
rory_robinson@nps.gov

REMEMBER: The north side of the river is a bird sanctuary. Entry to the north side of the river is prohibited. Horse back riders will enjoy the Ly-Co-Ki-We and Horse Trail with it's moderate terrain and a series of loops, up to 6.4 miles. Horseback riding is permitted from March 16-December 14.

The Indiana Dunes National Lakeshore provides hiking and walking opportunities. All park areas are connected by local roads. The park maintains over 45 miles of trails for visitor use. They are designed for specific and multiple purposes. Examples include; hiking, cross-country skiing, bicycling, and horseback riding. There are no off-trail activities allowed on the National Lakeshore.

Highlights of the park's trails include: Bailly-Chellberg Trail, a Moderate trail with two loops totaling 2.5 miles connecting historic areas. Southeast of the homestead, the **Little Calumet River Trail** will add 2.2 miles. The Cowles Bog Trail is Moderate to rugged. It has two trail heads with three loops; 5 miles. Features include interdunal ponds, marshes, stands of northern white cedars, forested dunes, fore dunes, and open beach. The Heron Rookery Trail provides an easy, 2 mile (one-way) linear trail running parallel to the river on the south side. Forested watershed, reclaimed farmland, excellent bird watching and spring wildflowers are profiled along this trail.

US Forest Service

The Hoosier National Forest provides trail opportunities year around to as many users as possible while protecting forest resources. Most trails are used by hikers, horse riders and mountain bikers. Their multiple use policy is based on the limited amount of land available for the development of new trails. The Hoosier National Forest provides 266 miles of trails of which 47 miles are single use (hiking) trails.

The Hoosier National Forest has instituted a fee program. The Federal Recreation Enhancement Act has granted them the authority to charge a fee for trail use. Most of the funds collected are to be returned to the Forest for trail maintenance. Under this program, the high impact users, horse and bike riders, pay a \$3 daily or \$25 annual fee to ride Hoosier National Forest trails. Users can purchase trail tags from local stores that sell them on a consignment basis.





Local Governmental Agencies

In Indiana, local governments are at the forefront of providing trails. While state and federal agencies provide trails that are associated with a large natural resource based property, the local agencies are providing the trails used day to day by Hoosiers. Trails that connect communities, stimulate economic development and provide opportunities to highlight quality of life exist in many, but not all, of Indiana's cities and towns. Virtually all of these trails have been developed and maintained by Indiana's municipal governments. In many cases, grant funds have made these trails a reality.

Local agencies have not only been at the forefront of developing trails, they have also taken the lead in developing creative ways to pay for them. Local communities have crafted public private partnerships in a variety of ways to leverage grant funding. In many cases, these partnerships have put miles of trails on the grounds without the benefit of grants. Many of Indiana's premier community trails have been developed through partnerships with health organizations, community foundations and local benefactors.

Local agencies continue to manage these trails for the benefit of their constituents. Funding for operating and maintaining these trails is a constant concern for these agencies. They are continually developing new and more efficient ways of maintaining trails surfaces. In some cases, local ordinances require that land be set aside for recreation and trails. More progressive communities are also including long term maintenance in these requirements.

Not-for-profits and the private sector

Not-for-profits and privately-owned corporate entities have been the main driving force behind funding the development of trails in Indiana. Examples of statewide organizations that have benefited trails include the Greenways Foundation and the Indiana Rails to Trails Conservancy. Countless other trails have been made possible through donated labor and materials garnered by grass roots organizations.

Many of Indiana's trails are maintained using both individual volunteers and groups dedicated to a particular trail. Taking care of these trails offers individuals the opportunity to "give back" to the communities that have served them and provide for meaningfulness in their lives. People Pathways, the Friends of the Pumpkin Vine, and the Cardinal Greenways are all volunteer organizations that exist for the sole purpose of funding and maintaining a trail.

Many local businesses have developed trails through their properties to connect to existing trails and allow public access. Still more have located their business along trails as an added benefit. More businesses are realizing the value of trails for employees' physical and mental health. As a result, private and corporate trails are more numerous and need to be included in comprehensive trail plans. In addition, many developers realize that the incorporation of a trails system can help increase housing and office space values and/or increase sales.



Progress Towards Developing Trails in Indiana

In going forward with a new plan for trails in Indiana, it should prove helpful to look back and assess progress under the previous plan. The trails plan within Indiana SCORP 2000-2004 outlined five primary goals and a list of objectives to reach each goal.

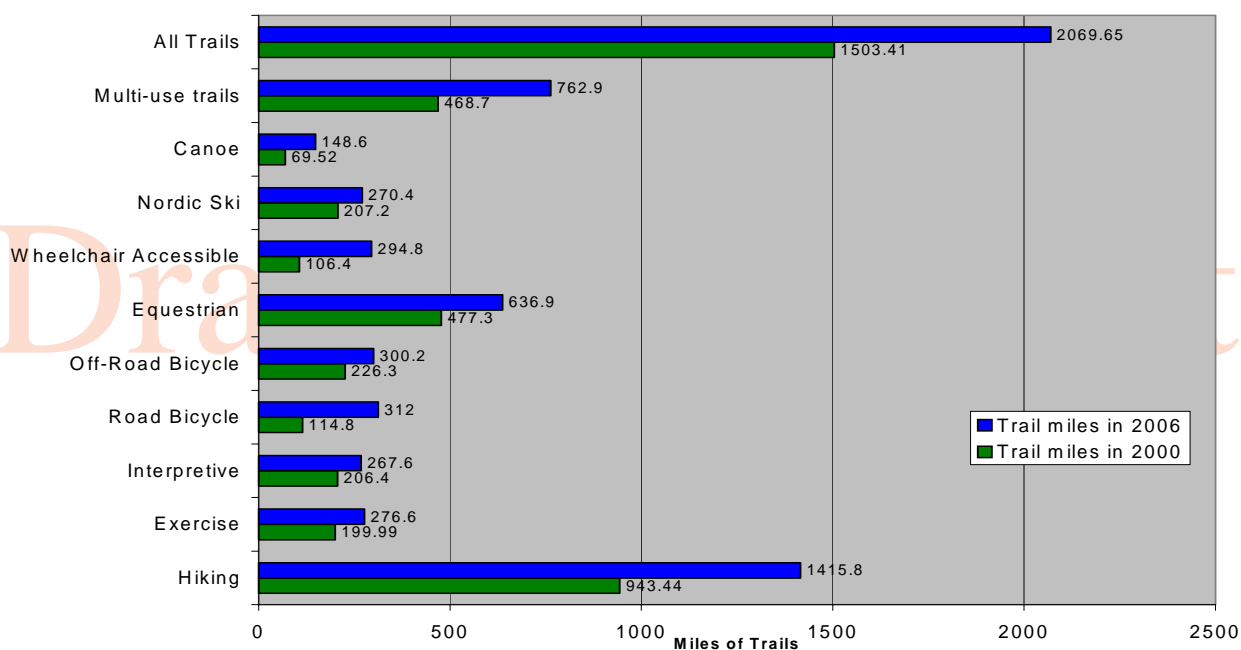
Under Goal #1, "Acquire more land and waterways for trail use", the first three objectives were very similar, calling for identification of suitable locations for trail development and acquiring land as necessary. Since 2000, several multi-county regional trail planning initiatives and discussions have taken place or are in process. As a result of local cooperative efforts, these multi-county regions are beginning to identify the best opportunities for creating regional trail systems. Regional efforts include a ten county area of central Indiana, the three county area covered by the Northwest Indiana Regional Planning Commission, a ten county area of north central Indiana and southwest Michigan, a nine county area of northeast Indiana, a six county area of the Central Wabash River watershed, and a three county area in extreme southwest Indiana. Several long distance, corridor specific projects have also been proposed including the cross state National Road Heritage

Trail from Terre Haute to Richmond, and the Farm Heritage Trail from Indianapolis to Lafayette.

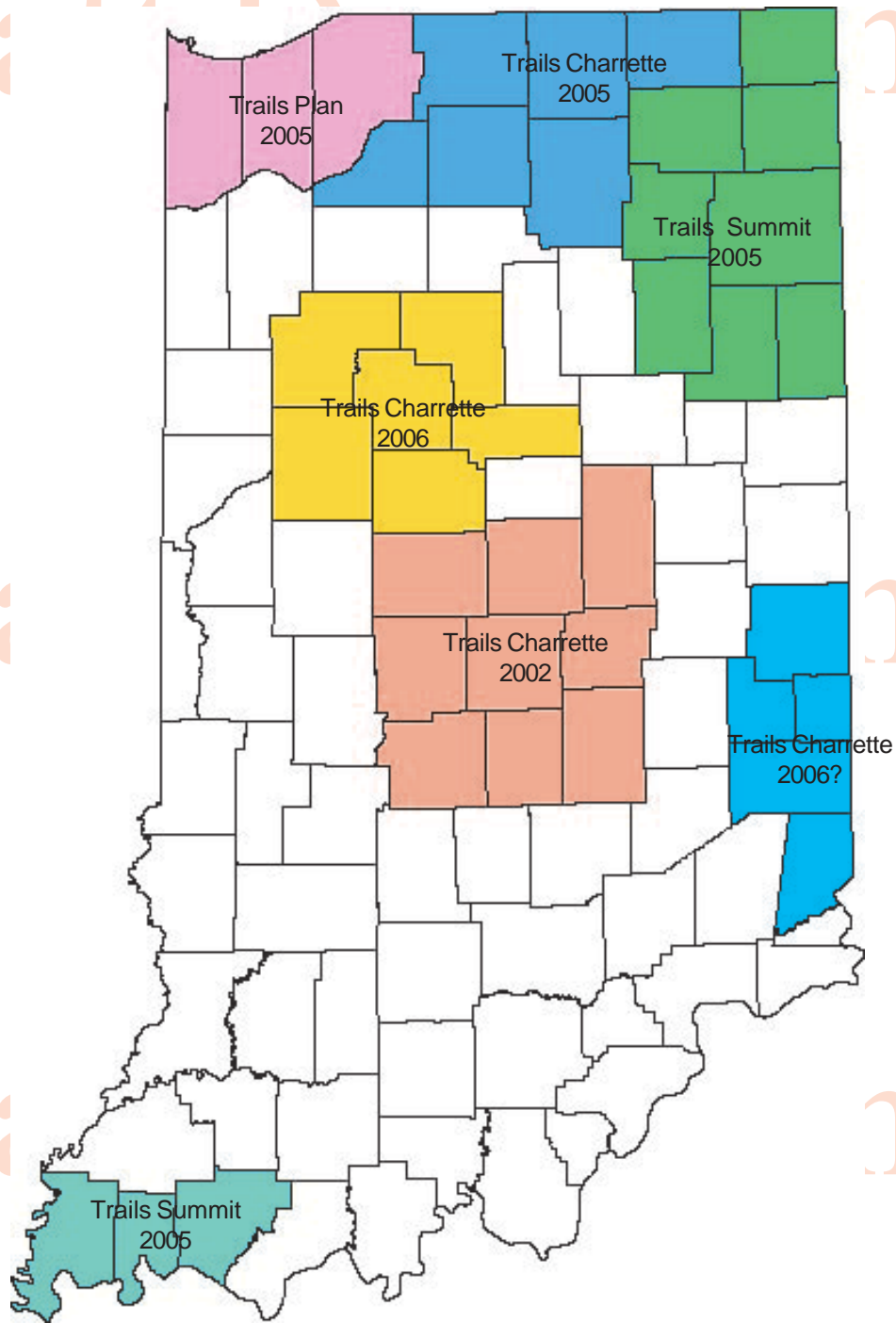
Another objective under Goal #1 was to "Encourage legislation supporting rail-trails." Use of former railroad corridors is often considered the ideal means to connect communities with trails. However, abandoned railroad corridors in Indiana have proven difficult to acquire for trail development. Court rulings have determined that railroads rarely had title ownership of land along the entire length of any of these corridors. According to Indiana law, land not owned in fee simple by the railroad reverts to original or adjacent landowners. Of special interest are three recent class action settlements involving former Penn Central, CSX, and Conrail railroad corridors. These settlements involved almost 2000 miles of former railroad corridor and resulted in only about 10% or 200 miles of corridor being favorable for acquisition from the railroad companies for trail development. Efforts to acquire land along these corridors have met with limited success.

Railbanking, a means of preserving railroad corridors before they are abandoned, has been successfully used in recent years to acquire use of former railroad corridors for trail development. The Indiana Trails Fund has taken the lead in this effort by railbanking just over 100 miles of former rail-

Change in Number of Non-motorized Trail Miles Since 2000



Local Regional Planning Efforts for Trails



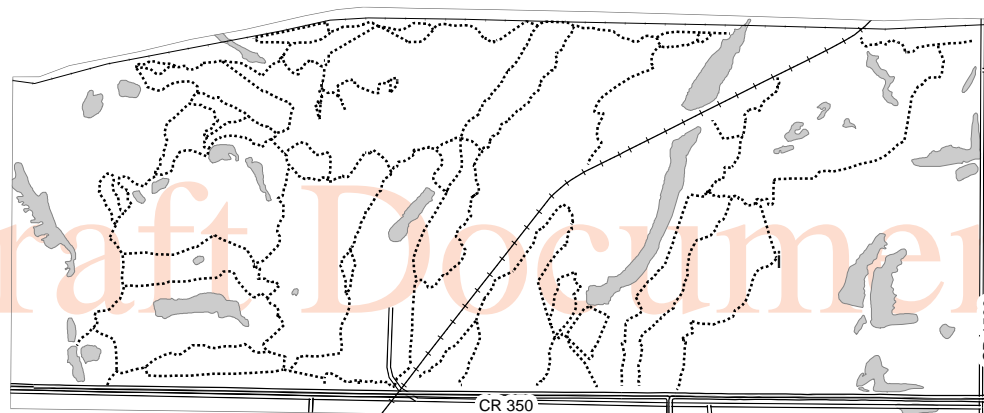
road corridor. Local governments are also beginning to take interest in the pursuit of railbanking. Changes to Indiana Code 8-4.5 were proposed in the 2005 state legislative session that would have made it easier for the state to play a more proactive role in preserving railroad corridors that are proposed for abandonment. Some of the proposed changes passed, while others did not. A key proposal that did not pass was the right of first refusal by the state. One thing is clear, once abandoned, former railroad corridors diminish in opportunity for trail development. The railbanking process is discussed in detail later in this chapter.

Another objective under Goal #1 was “Provide public areas for the legal operation of ATVs, motorcycles, and off-highway vehicles”. Redbird State Riding Area, the first state property open to off-road vehicle use, was opened in 2003 near the town of Dugger in Greene and Sullivan counties. Land acquisition and development continue at Redbird with a goal of eventually reaching 1400 acres. Redbird Riding Area will eventually provide 70 miles of motorized off-road trails. Off-road vehicle riding is also being planned for the Interlake property near Lynnville in Warrick and Pike counties. The Interlake property consists of 3500 acres that will be developed and managed for multiple uses including hunting, fishing, horseback riding, mountain biking and off-road vehicle riding.

Providing public areas for the legal operation of off-road bicycles was another objective of Goal #1. In 2001, as a result of a mountain bike trail pilot project at Huntington Reservoir, the Natural Resources Commission approved of the regulated use of mountain bikes on Department of Natural Resource (DNR) properties. Shortly afterwards, DNR Division of Forestry approved of the use of mountain bikes on five forestry properties. In 2005, mountain bike trail development was approved at Brown County State Park and Versailles State Park. The Hoosier National Forest expanded mountain bike opportunities by constructing a new 12.7 mile multi-use trail around Spring Valley Lake. Local public agencies, often with support from mountain bike organizations, have also added a number of mountain bike trails including state of the art trails recently completed at Westwood Park in Henry County. The International Mountain Bicycling Association has raised the grade of Indiana from a D- to a C+, stating that there is still a lack of close to home mountain bike riding opportunities near urban centers.

Under Goal #2, “Develop trail networks that allow for multiple uses and promote alternative transportation”, one of the objectives was to support legislation that furthers the development of multi-use trail networks. As previously mentioned, in

Redbird State Riding Area



Legend

- i Parking
- Riding Trails
- Power Line
- +— Railroad
- Ponds

0 0.1 0.2 0.4
Miles

NOTICE: Redbird Riding Trails are subject to change.

Map Date: June 7, 2003

2005 changes were made to Indiana Code 8-4.5 that could make it less difficult for the state to participate in preserving rail corridors that are proposed for abandonment. However, the right of first refusal for the state was not adopted and IC 8-4.5 still contains a number of provisions that are considered obstacles to trail development.

Another objective under Goal #2 was to identify existing and potential trail connection opportunities. One of the ways in which this objective is being achieved is through the regional trail planning initiatives discussed under Goal #1. As existing and planned trails are identified they have been added to the Indiana trails inventory. The trails inventory serves to identify the framework for a statewide trail system and provides much of the basis for the maps presented in the remainder of this document. The inventory is also available on the web.

Also under Goal #2 was an objective to develop a network of existing roads for recreational use and alternative transportation. This objective is being achieved in two ways. For off-road motorized vehicle use, DNR developed a website that identifies which counties allow registered off-road motorized vehicles on county roads. For bicyclists, DNR developed a website that identifies which counties are served by some type of established bicycle route system. The Indiana Department of Transportation is taking a lead role in promoting alternative transportation by currently working on a state bicycle plan that will cover bicycle routes throughout Indiana.

Goal #3 called for design, construction and maintenance standards. While there have been no statewide efforts to develop such standards, there has been a good deal of work in this area at the local and national level. In 2001, the U.S. Department of Transportation released a best practices design guide entitled *Designing Sidewalks and Trails for Access* that incorporates the latest in American Association of State Highway Transportation Officials (AASHTO) and ADA standards. In 2002, the National Recreation and Park Association published OHV Park Guidelines in association with the National Off-Highway Vehicle Conservation Council. In 2004, the International Mountain Bicycling Association published *Trail Solutions*,



a guide to design and construction of mountain bike trails that can also be applied to other natural surface trails. In 2005, The Rails-to-Trails Conservancy developed a publication that details maintenance and operation of rail-trails based upon a survey of 100 rail-trails. An equestrian design guide is also being pursued through the Federal Highway Administration and should be ready for distribution in 2006. Instead of developing separate standards for Indiana, it may make more sense to publicize availability of these existing resources.

Goal #4 was concerned with providing information on trail systems. One objective under this goal called for the use of current technology to provide information about trails. The Indiana Trails Inventory developed by Department of Natural Resources is taking advantage of the latest in Geographic Information Systems (GIS), Global Positioning Systems (GPS) and web based programs to make information readily available about all of the existing and planned trails across Indiana. The Hoosier Rails to Trails Council also does a very good job of providing web based information about Indiana trails. Internet trail information sites are becoming even more useful as links are provided to websites that are being developed by managing entities of local trails. As trail systems develop, managing entities also tend to create printed trail guides which address another objective of Goal #4.

Another objective of Goal #4 was to develop a trail rating system to inform users of trail difficulty. The Universal Trail Assessment Process (UTAP), developed by Beneficial Designs, has been available

nationwide for almost a decade. UTAP is intended to standardize information about levels of difficulty and accessibility across all trails. The Indiana Department of Natural Resources took early steps toward implementing UTAP including purchase of necessary equipment and software and training of a handful of staff. However, UTAP was never fully implemented due to excessive man hours needed for implementation and the perception that the benefits of UTAP did not warrant making implementation a priority.

Also under Goal #4 was the objective of promoting responsible trail use. There are two national organizations devoted to trail stewardship and responsible trail use, Leave No Trace and Tread Lightly!. National, state and local trail user group organizations all tend to adopt and promote these trail stewardship principles. The 2003 Mid America Trails and Greenways Conference in Indianapolis also featured an education session on trail stewardship. It would appear responsible trail use is being promoted to trail users involved with trail organizations. In order to reach all trail users, including those not formally involved with trail organization, responsible trail use is often promoted through signage on trails and information within brochures and websites.

Ensuring long-term trail management planning was the focus of Goal #5. Objectives under this goal stressed the need for trail management

funding and use of volunteers. Dedicated state funds from off-road vehicle and snowmobile vehicle registrations have made it possible to develop and maintain trails for motorized vehicle recreation. Other types of trail development rely predominantly upon federal funds through the U.S. Department of Transportation, but there is virtually no state or federal funding available for local trail management and maintenance. A number of local trails have established "adopt-a-trail" programs including Cardinal Greenway and Indy Parks Greenways. Some trails, such as the Cardinal Greenways, depend almost exclusively upon volunteers for trail maintenance. Other trails, such as Delphi Historic Trails, utilize volunteers for both trail construction and maintenance. Management of the Redbird State Riding Area is accomplished through a contract with volunteers from off-road vehicle groups. State snowmobile trails rely heavily upon snowmobile club volunteers for trail construction and maintenance. Hikers, mountain bikers, and equestrians are also well known in Indiana for their organizations' involvement with trail maintenance and construction.

Using the 2000-2004 Indiana Trails Plan as guide, significant accomplishments were achieved for Indiana trails. Pertinent goals and objectives from the previous trails plan that were not fully achieved are included as part of this new plan for Indiana trails.



Funding for Trails

Funding for trail development and acquisition has been and will continue to be an issue. Prioritizing trail construction in federal, state and local agency budgets remains a challenge since trails are often rated nonessential. This is especially true when they compete with all other governmental spending. Creative funding for trail projects is essential. Knowing the options and combinations of funding opportunities assures that trail projects become a reality. This section will examine governmental grants and other funding options available for trail projects.

Not-for-profit organizations and private groups have always been at the forefront of developing trails and continue to be important funding sources. Local community clubs, associations and auxiliaries are actively trying to improve the quality of life in their respective communities. These groups view trails as one aspect of community enhancement. Some not-for-profits are established specifically for trail development in specific counties, communities or corridors such as the Cardinal Greenway Inc., Pumpkinvine Trail Inc., and the Rail Corridor Development Inc. They may not provide financing directly but are set up to collect then distribute funds to build projects. Statewide not-for-profits like the Indiana Trails Fund and the Indiana Greenways Foundation can act as funding agents as well as land holding agents for trail projects needing an interim entity to pursue state or federal grants. The Trust for Public Land, a national not-for-profit for land preservation, acquires greenways.

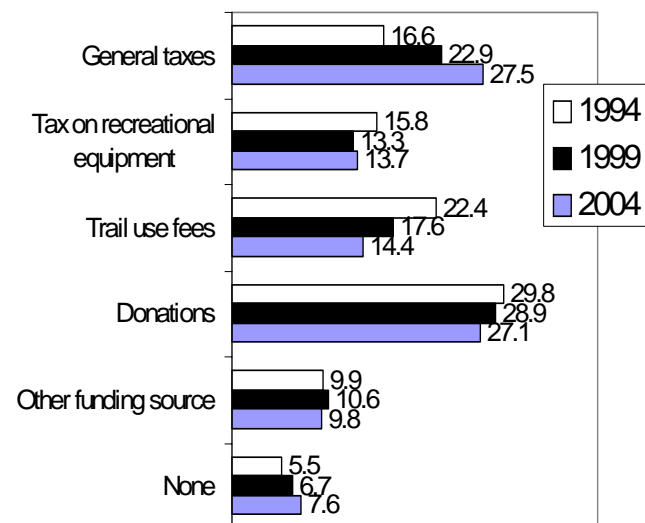
Tapping into the private health community has a direct correlation to trails. Hospital foundations have sponsored trail projects in the state and potentially could play a much greater role in trail building. Health centers and some health insurance companies are looking at ways to lower health costs. The direct link of physical exercise/trail use and health is proven.

Some trail programs will match with funds with volunteer labor, land or material donations helping dollars stretch. Carpenters, architects, engineers or planners willing to donate their services to a project can become a part of the funding source

for matching monies with grants. Other donation opportunities exist through private businesses, sororities and fraternal organizations, neighborhood associations, individuals, bequests from estates, community service workers, retirees, school and church groups, local scouting organizations, university interns or prison work crews providing matching sources or the physical labor of just plain getting the trail on the ground.

Community or county foundations fund a variety of projects which could and do include trails and greenways. They can also serve to foster public/private partnerships. Another possible partnership strategy is to create green infrastructure through utility companies that have an interest and are willing to accommodate a utility corridor being used for a trail or vice versa. More and more above ground electric utilities are becoming amenable to allowing trails in their corridors and are even willing to donate fiscally to the project. Underground utilities on corridors can help secure the property and fund the above ground development with lease or easements payments for fiber optics, sewer, water, gas etc. These payments could be used for capitol improvements or maintenance on a trail project. In some cases allowing utilities under (and over) trail corridors could be an opportunity for the trail to be built at no expense to the trail provider. Combining green

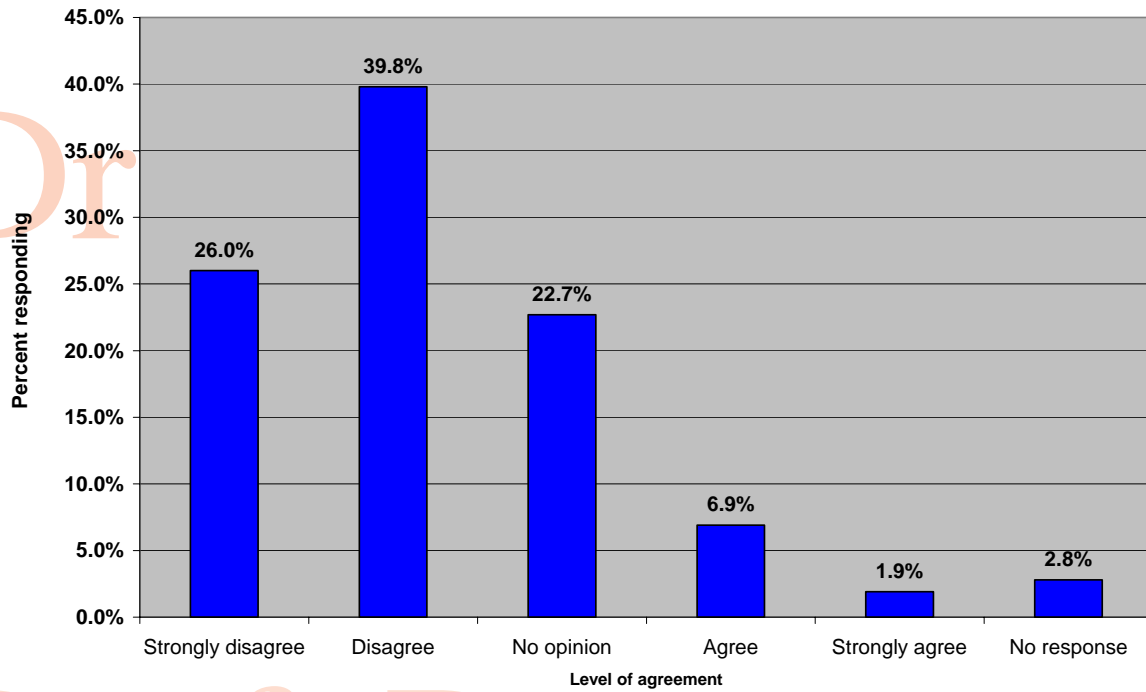
Of the following, which do you feel should be the primary source of funding for the development of recreational trails?



Percent responding

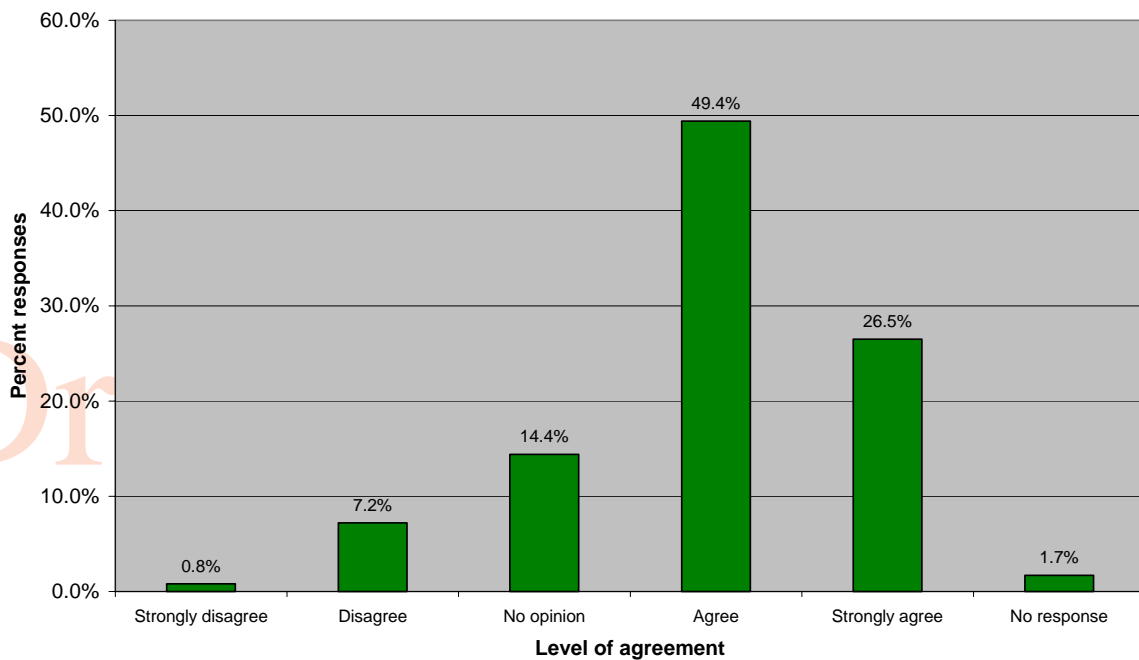
Indiana Trail Users Survey, 1994, 1999, 2004

Current funding for trail development in Indiana is adequate.



Indiana Trail Issues Survey, 2005

There should be state tax incentives to individual citizens and public utilities for their participation in land acquisition for trails.



Indiana Trail Issues Survey, 2005

infrastructure (trails) with existing or planned infrastructure is a win /win opportunity.

Tax Increment Finance (TIF), Cumulative Capitol Development (CCDF), County Optional Income Tax (COIT), County Economic Development Income Tax (CEDIT), Cumulative Capital Improvement Fund (CCIF), Motor Vehicle Highway Account (MVH), Local Road and Street Account (LR&S), Economic Development Income Tax (EDIT) and Non-Reverting Thoroughfare Development Fund (NRTDF) are financial avenues open to trail projects. Gaming Boat revenue could be employed for trails in eligible counties. Local entities can speak to their local elected officials on the possibility of using any of these funds for trail development and/or matching of grants available for that purpose. Trail impact fees are being established for trail development by communities around the state.

These funds are being used directly to finance trails as well as incentives for developers to build trails when they are constructing their projects.

State and Federal Funding

Indiana Department of Transportation (INDOT) administers multiple programs on behalf of the Federal Highway Administration (FHWA) that relate directly to trail/greenway development. Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU) is the current highways bill in which these programs are funded. All projects funded through this federal money must be programmed in the State's Transportation Improvement Program (TIP) and those in urbanized areas must also be in their respective Metropolitan Project Officer's (MPO's) TIP.

Transportation Enhancements (TE): Is a provision of the Inter-modal Surface Transportation Efficiency Act of 1991 (ISTEA) that requires states to set aside 10 percent of their share

of Surface Transportation Program (STP) funds for projects that enhance the existing transportation system. States have the flexibility to design a program to best suit their needs within the limits of the law. This program was continued and somewhat expanded under, TEA-21 (Transportation Equity Act for the 21st Century) and under the current transportation bill. This program is an 80/20% matching fund. There are 12 eligible categories within TE that relate to surface transportation and 4 of those relate specifically to bicycle/pedestrian activities. Those categories are 1. Pedestrian and bicycle facilities, 2. Pedestrian and bicycle safety and education, 3. Preservation of abandoned railroad corridors, 4. Historic transportation building, structures, and facilities (places historic bridges on bike/ped systems).

Transportation Enhancements Funding for Bicycle and Pedestrian Projects by County as of 2006

Allen	\$397,116	Lagrange	\$1,000,000
Bartholomew	\$2,687,569	Lake	\$15,528,720
Boone	\$845,000	LaPorte	\$950,000
Brown	\$1,272,000	Madison	\$2,284,481
Cass	\$960,000	Marion	\$17,085,154
Clark	\$5,417,000	Marshall	\$1,000,001
Daviess	\$545,000	Martin	\$1,000,000
Dearborn	\$2,476,197	Miami	\$1,950,000
Delaware	\$13,519,592	Monroe	\$8,082,610
Dubois	\$1,347,597	Montgomery	\$800,001
Elkhart	\$3,904,146	Morgan	\$1,000,000
Floyd	\$340,000	Ohio	\$561,690
Fountain	\$2,045,885	Parke	\$1
Franklin	\$85,000	Pike	\$300,000
Fulton	\$1	Porter	\$7,083,001
Gibson	\$16,000	Putnam	\$1,375,327
Grant	\$1,400,000	Scott	\$1,000,000
Hamilton	\$4,136,000	St. Joseph	\$1,548,000
Hancock	\$480,000	Steuben	\$2,000,000
Harrison	\$836,678	Tippecanoe	\$2,328,790
Hendricks	\$5,915,100	Vanderburgh	\$6,310,915
Henry	\$1,400,000	Various	\$500,000
Howard	\$765,912	Vigo	\$2,664,771
Jay	\$560,000	Warrick	\$3,500,000
Jefferson	\$1,000,000	Wayne	\$2,654,545
Jennings	\$1	Wells	\$1,734,000
Johnson	\$1,000,000	White	\$720,000
Knox	\$1,000,000	Whitley	\$500,000
Kosciusko	\$1,460,000		
		Grand Total	\$144,803,801

Indiana's TE program funds transportation projects that expand beyond the traditional accommodations for cars, trucks, buses and transit. This fund is Indiana's largest funding source for trails/greenways projects. TE funding is a cost reimbursement program and not a grant. The sponsor must pay at least 20 percent of a project's cost to show commitment by the local group or community. Applicants may receive reimbursement for eligible costs as work is completed. TE strengthens the cultural, aesthetic, and environmental aspects of the nation's inter-modal transportation system.

Congestion Mitigation & Air Quality (CMAQ) An 80-20 federal funding program is only available in urbanized areas (areas exceeding population of 50,000) designated by the US EPA as NOT meeting current air quality standards for various pollutants. 6 areas in Indiana currently qualify. Key considerations for projects funded with this source are improving air quality and being able to document that positive impact. The MPOs evaluate all sorts of projects that help air quality. As a result transit projects, ridesharing projects, certain signal upgrade projects, ozone alert projects, etc. provide competition for limited funds. Candidate projects are annually submitted to and evaluated by INDOT in a statewide application process.

Safe Routes to School (SR2S): A new federal funding source that was created specifically to encourage and improve the safety of children walking and bicycling to and from school. There are limitations on the use of these funds. They target only elementary and middle schools (K-8), not high schools. Improvements need to be located within two miles of the intended schools. Schools can be public or private. There is no match requirement for these funds. There should be a demonstrable positive effect on the numbers of children biking or walking to school. Most of available funds (70%-90%) would be directed toward construction projects, while a smaller amount (30%-10%) are required be directed toward education, encouragement and enforcement efforts (non-construction projects). These projects can have secondary beneficiaries, such as area residents or employees or adults walking and biking in the vicinity of the school,

but the primary targets are school children. Secondary impacts on school children are insufficient to justify a project.

Transit Funds (TF): is a general category of funds administered by the Federal Transit Administration; it is not a specific program.

Transit funds, in general, improve or promote better access to public transportation (e.g. bus or rail). Near transit stops or along corridors used frequently by transit vehicles there may be opportunities to improve transit use that would, at the same time, make it easier or safer to walk or bike. For example, sidewalk improvements near transit stops will improve access for transit users but also enable people who are not catching the bus to walk more safely. Transit funds can be used to purchase bike racks for buses or to install bicycle racks and bike lockers at transit centers. The objective is to make it more convenient to use transit and that remains the primary purpose of transit funds. Pedestrians and bicyclists would be secondary beneficiaries.

National Scenic Byway (NBS): This discretionary grant program makes federal funding available for 8 project types that directly benefit designated byways. Among eligible uses are projects that improve bicycle and pedestrian safety and access along the byways and to important byway-related resources in the corridor. The 80-20 federal funds in this program are required to contribute directly to the byway and the experience of byway travelers and not simply in an incidental way. Indiana has two nationally designated byways and one state-designated byway. These funds are not available outside the byway corridors. Once a year NSB applications are submitted to the state DOT, thoroughly reviewed and forwarded to FHWA for consideration under a national merit-based program. Walkways, curb ramps, crosswalk treatments, bicycle racks, trail facilities and rest stops that are readily available and intended for byway travelers are examples of improvements benefiting cyclists and pedestrians.

Indiana Recreational Trails Program (RTP): This 80/20 matching program is intended to develop and maintain non-motorized and motorized recreational trails. Originally called the National Recreation Trails Trust Fund Program, this

money comes from federal motor fuel excise taxes paid by users of motorized off-highway vehicles. In Indiana, this fund is administered by the Indiana Department of Natural Resources. By legislation, at least thirty percent of the funds are to be used for non-motorized trails, and at least thirty percent of the funds are to be used for motorized trails. The remaining forty percent is discretionary for diversified trail uses and education.

To date, RTP has provided more than \$4.9 million dollars for trail projects including Indiana's first publicly owned motorized vehicle riding area, Redbird State Riding Area. Since its inception in 1995, it has put over 100 miles of trail on the ground that are helping to create safer, more livable communities through the development of walking, hiking, equestrian, mountain bicycling, bicycling, off-road motorized, water trails.

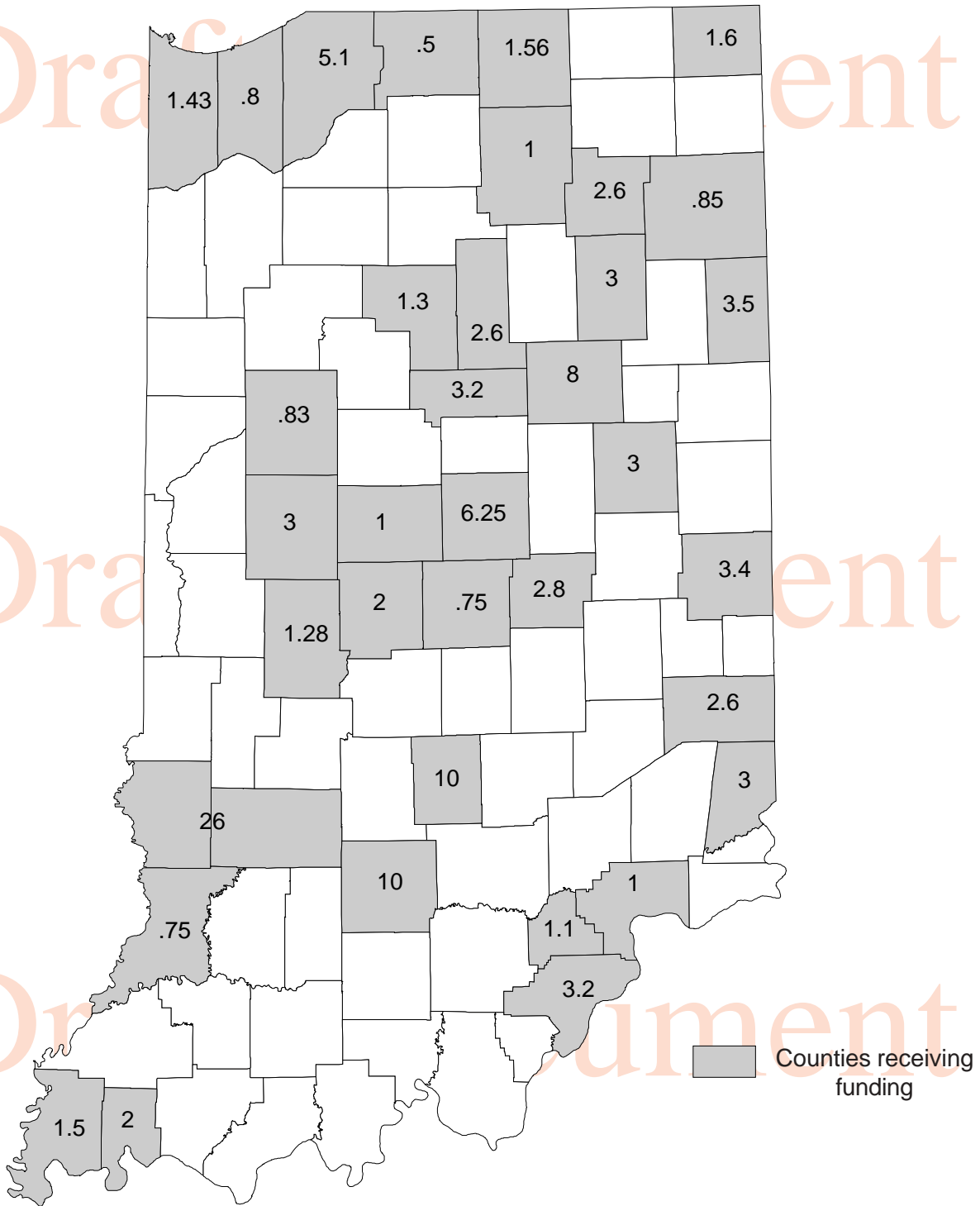
Land and Water Conservation Fund (LWCF): This is a 50/50% matching program administered by the IDNR through the National Park Service, Department of Interior. The program is for the acquisition and development of outdoor recreation



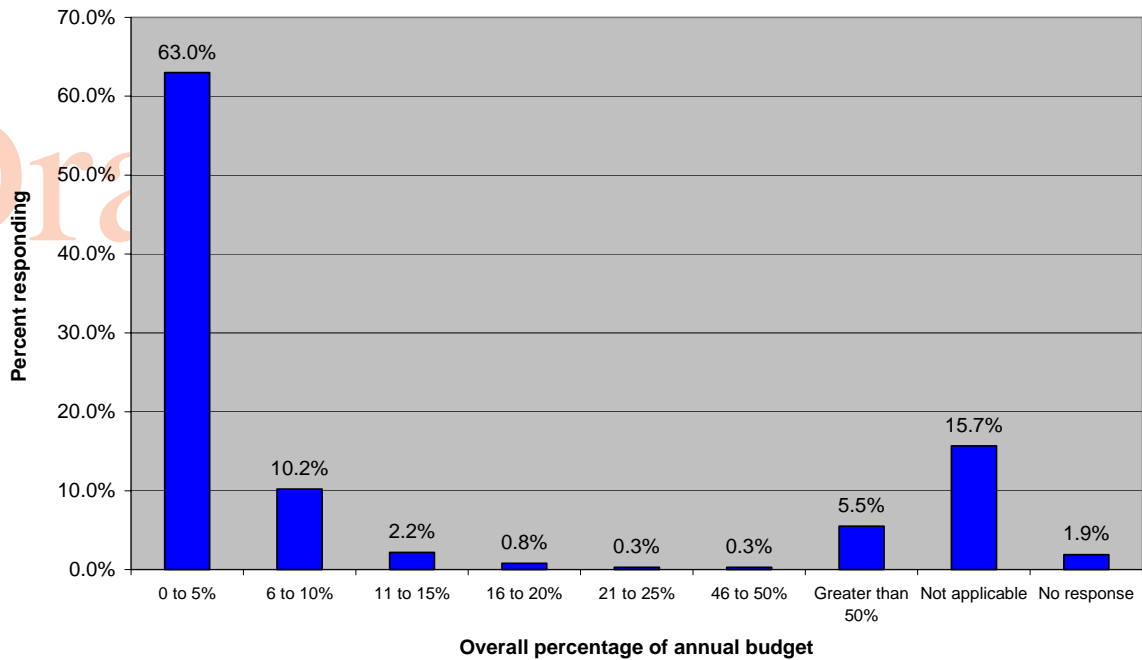
Recreational Trails Funding by County by Year

County	Trail Miles	Grant Amount	Year
Adams	3.5	\$150,000.00	2005
Allen	0.85	\$150,000.00	2005
Boone	1	\$62,800.00	1999
Brown	10	\$150,000.00	2005
Cass	1.3	\$150,000.00	2002
Clark	3.2	\$44,000.00	1996
Dearborn	3	\$65,870.00	1999
Delaware	3	\$87,100.00	2000
Elkhart	0.92	\$87,100.00	2000
Elkhart	0.66	\$150,000.00	2002
Franklin	2.6	\$150,000.00	2005
Grant	2	\$150,000.00	2001
Grant	3	\$150,000.00	2002
Grant	3	\$113,470.00	1997
Greene		\$174,200.00	2000
Greene		\$300,000.00	2003
Greene		\$280,836.00	2004
Greene	26	\$255,103.00	2005
Greene		\$99,530.00	1998
Hamilton	0.25	\$14,436.00	1996
Hamilton	3	\$100,000.00	1998
Hamilton	3	\$100,000.00	1999
Hancock	2	\$150,000.00	2005
Hendricks	1.8	\$119,841.94	2003
Hendricks	1	\$100,000.00	1996
Howard	1.5	\$143,913.00	2004
Howard	1.7	\$100,000.00	1999
Huntington	3	\$67,682.00	1994
Jefferson	1	\$88,000.00	1999
Knox	0.75	\$38,486.00	1997
Kosciusko	1	\$100,000.00	1999
Lake	0.6	\$150,000.00	2001
Lake	0.53	\$76,072.27	2002
Lake	0.3	\$100,000.00	1998
LaPorte	1	\$87,100.00	2000
LaPorte	2.6	\$150,000.00	2004
LaPorte	1.5	\$100,000.00	1998
Lawrence	10	\$69,680.00	2000
Lawrence		\$150,000.00	2001
Marion	0.75	\$65,000.00	1998
Miami	2.6	\$150,000.00	2004
Montgomery	3	\$150,000.00	2003
Porter	0.8	\$150,000.00	2004
Porter	0	\$59,200.00	1996
Posey	1.5	\$150,000.00	2003
Putnam	1.28	\$144,188.00	2003
Scott	1.1	\$71,096.25	2000
St. Joseph	0.5	\$100,000.00	1999
Steuben	1.6	\$113,470.00	1997
Sullivan		\$78,018.38	2001
Sullivan		\$225,459.55	2002
Tippecanoe	0.83	\$87,100.00	2000
Vanderburgh	2	\$148,470.00	2004
Wayne	3.4	\$100,000.00	1996
Whitley	2.6	\$82,042.89	2001
Outdoor Recreation	0	\$20,000.00	2005
Outdoor Recreation	0	\$7,993.00	1996
Grand Total		\$6,677,258.28	

Miles of Trail Funded by the Recreational Trail Program by County

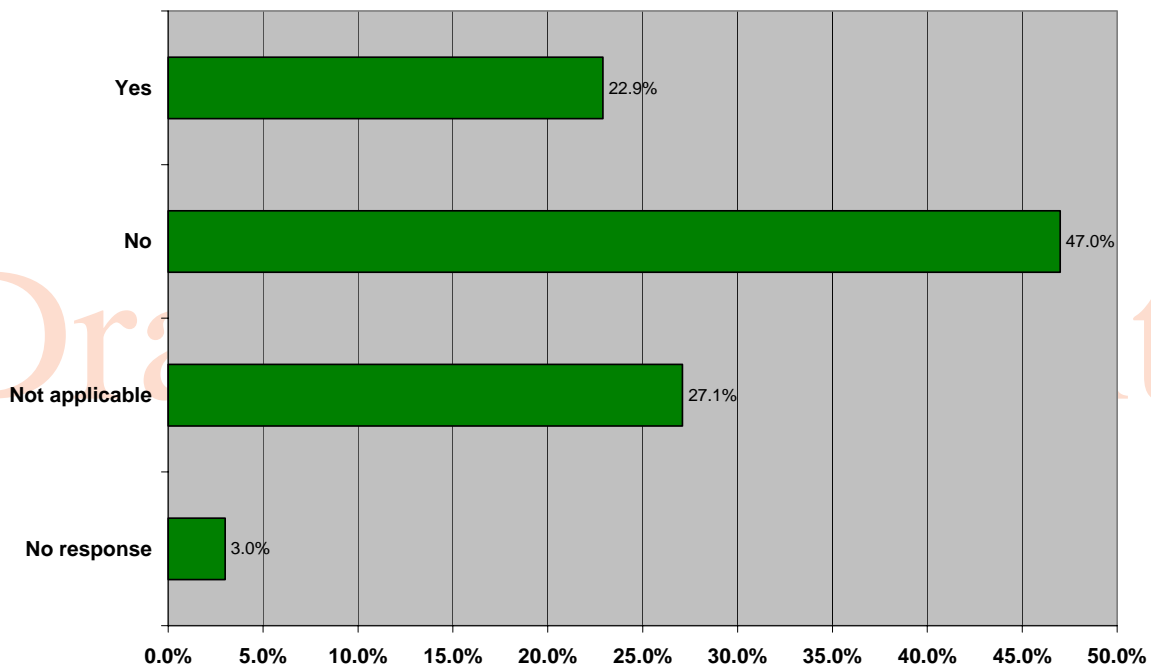


What approximate percentage of your total annual operating budget is used for trails?



Indiana Trail Issues Survey, 2005

Does your organization have a long term plan for funding trail maintenance and management?



Indiana Trail Issues Survey, 2005

areas. Trails are one of the priorities of this program in Indiana.

Indiana Heritage Trust (IHT): This state land acquisition program was established to preserve land and among the priorities is greenways acquisition. Matching requirements vary with the program. Funds come from the sale of the environmental license plate and sometimes from legislative appropriations

Planning

Local trail planners should contact INDOT with trail projects that follow along, cross over or go under a road project to examine if the trail costs can be incorporated into the road project. One example would be a tunnel design that could include an existing or potential trail corridor to be installed with the road project. It is essential that trail plans exist and INDOT is contacted as early as possible when planning road projects so trails can be accommodated. To create a trails master plan there are planning dollars available from Federal Community Development Block Grant (CDBG) dollars through the Indiana Office of Community & Rural Affairs. Communities and counties have to qualify under certain factors to be eligible for these monies.

Transportation and Community and System Preservation (TCSP): This discretionary funding source through FHWA that is usually 100% monies that are requested through elected congressional officials. Trails are one eligible aspect of this program.

Planning for the long term life of a trail is also a key funding concern. Maintenance partnerships will become increasingly important as a trail ages. Entities managing trails are establishing endowments addressing long term maintenance needs. Volunteer groups who constructed the trail may be used to maintain them. City/county agencies can investigate which agency is best suited to cost effectively maintain the trail. Proper plant species, low mow or no mow practices limit the amount of fossil fuels used to maintain trails. The possibility of utility corridors with trail being maintained by the utility is another option for maintenance. With the limited amount of trail funding opportunities for development it is essential that alternative methods of managing trails be explored to the fullest extent. Creating sustainable trails should be incorporated into the trail design and construction.



Indiana Transportation Corridor Planning Board

This section is taken from the 2003 report of the Transportation Corridor Planning Board.

The Transportation Corridor Planning Board (TCPB) was established by Public Law 40-1995 that created Indiana Code 8-4.5.3. These statutes require the Indiana Department of Transportation (INDOT) and the Indiana Department of Natural Resources (IDNR) to annually submit the following to the TCPB:

1. A list of existing rights-of-way that might be abandoned during the following year.
2. Priorities for potential future uses of right-of-way consistent with INDOT's comprehensive transportation plan and IDNR's trail system plan.

Indiana Code also requires INDOT and IDNR to prepare an annual report that meets with the approval of the TCPB. The 2003 report included the following information:

1. A description of the rights-of-way abandoned during the previous year;
2. A TCPB approved version of the list of existing rights-of-way that might be abandoned during the following year;
3. A TCPB approved version of the prioritized list of potential future uses for the rights-of-way consistent with INDOT's comprehensive transportation plan and IDNR's trail system plan;
4. A list of any property purchased under the program outlined in IC 8-4.5;
5. Sources of funding for the program outlined in IC 8-4.5-3-7 otherwise known as the Transportation corridor Fund; and
6. Other information that the TCPB considers relevant.

The 2003 report found that railroads seeking to abandon a line through the exemption process (fast track abandonment with little oversight from the STB) are not required to file system diagram maps. Sixteen of Indiana's seventeen abandonments since 1995 were filed under the exemption process and never appeared on a system

diagram map. System diagram maps are, therefore, poor indicators of future railroad line abandonment activity.

Under the exemption process, the first official indication of a railroad's plans to abandon a line comes in the form of a request for environmental and historical review. These requests are usually made only a month or two in advance of an official exemption notice. Once the exemption notice is filed, the line can be abandoned within 45 days. Relying only on the methods suggested by IC 8-4.5 to identify potential abandonment candidates could mean that the state would have as few as 75 days to react before a rail right-of-way is lost.

A better source of tracking the operating status of active lines is to look at the railroad's broader plans for rationalization of its system, rather than specific indications about particular lines. Rationalization activities encompass potential abandonments, but also include lines whose operational characteristics might change through a line sale, shortline spin-off, trackage rights assignment, or operating lease. Therefore, clues to rationalization are better indicators of which lines the state should watch for potential preservation activities.

In addition, the State of Indiana has a broader interest in corridor preservation than simply preserving right-of-way after lines have been abandoned. Preservation of active lines through shortline development or, in rare cases, contested abandonment applications, may be the best way to ensure that Indiana's long-term transportation interests are protected. It is, therefore, important that INDOT and the TCPB remain informed about railroad company rationalizations.

INDOT and IDNR reviewed and prioritized a list based on a process recommended by Parsons Brinkerhoff Quade & Douglas, Inc. as part of the Indiana Rail Corridor Preservation Study completed in Feb. 2003. The Departments first evaluated the perceived level of threat to the line, the likelihood that the operating characteristics of

a line would change. Relative threat level was gauged on factors such as traffic volumes, levels of service, a line's "fit" with the perceived long term system and the service goals of the owning railroad, freight customer contacts, conversations with the owning railroads, maintenance of the line, and monitoring industry publications and conferences. Once threat level was determined, INDOT and IDNR assigned a need level to each line in accordance with their long-range plans. The threat and need levels were then considered jointly by the Departments to develop a final ranking and proposed preservation use as required by IC 8-4.5-3.

To date, no property has been purchase by either INDOT or IDNR under the program outlined in IC 8-4.5. According to the report prepared by Parsons Brinkerhoff:

"The Indiana process is cumbersome and inflexible. The time needed to complete the process takes longer that the current federal process of the Surface Transportation Board which oversees all the rail line acquisitions and abandonments. The current Indiana process (required by the statute) has thus precluded the State of Indiana from taking the necessary steps to acquire rail corridors due to the fact that the federal abandonment process is usually complete and corridor "lost" before the prescribed state process for corridor preservation can be completed."

The TCPB, INDOT and IDNR have recommended that new state legislation be considered to revise the acquisition process for rail corridors in a way that allow INDOT and IDNR to work within the federal abandonment deadlines. Such legislation should:

1. Grant INDOT first right of refusal on abandoned rail corridors.
2. Authorize INDOT and IDNR to engage in negotiations with railroads for the purchase of active and abandoned rail corridors.
3. Give INDOT and IDNR a means to acquire a fee simple interest in these corridors through expedited eminent domain if the purchase cannot be negotiated.
4. Require INDOT and IDNR to meet annually with the railroads serving the state to assess their status and discuss any issues that might need attention. This will allow staff to annually update the list of rail corridors that might be rationalized during the coming year.
5. Require that INDOT and IDNR, in consultation with affected state and local agencies, annually prepare a master list of rail corridors for preservation
6. Modify the role of the TCPB to an advisory body, eliminating the requirement that the Board approved proposed corridor acquisitions.
7. Modify requirements for public input in the state process to align with the federal abandonment deadlines.

The Board's new advisory role would be facilitated if Board members were among those notified by INDOT when railroads file applications for abandonment. Currently, IC 8-3-1-21.1 requires INDOT to provide written notice of a railroad's intent to abandon a line to the County Commissioners, Mayor or Town Board, County Surveyor, Department of Commerce and De-

MATRIX CLASSIFICATION

RAIL CORRIDOR "NEED VS. THREAT" CRITERIA

		LOW	MEDUIM	HIGH
THREAT	LOW			
	MEDUIM			
	HIGH			

partment of Natural Resources. The TCPB recommends that INDOT administratively add TCPB members and any affected Metropolitan Planning Organization (MPO) to the notification list. Such notice would increase communication and provide an additional outlet for public awareness and involvement in the STB abandonment process.

In addition to the difficulties outlined above, the lack of adequate funding has been another significant obstacle to state corridor preservation. Costs to acquire rail lines typically range from \$10,000 per mile at the lowest to \$1,000,000 per mile or more in urban areas. Without access to substantial funds, or the ability to borrow funds for later repayment, INDOT and IDNR are largely unable to railbank or otherwise purchase railroads threatened with abandonment.

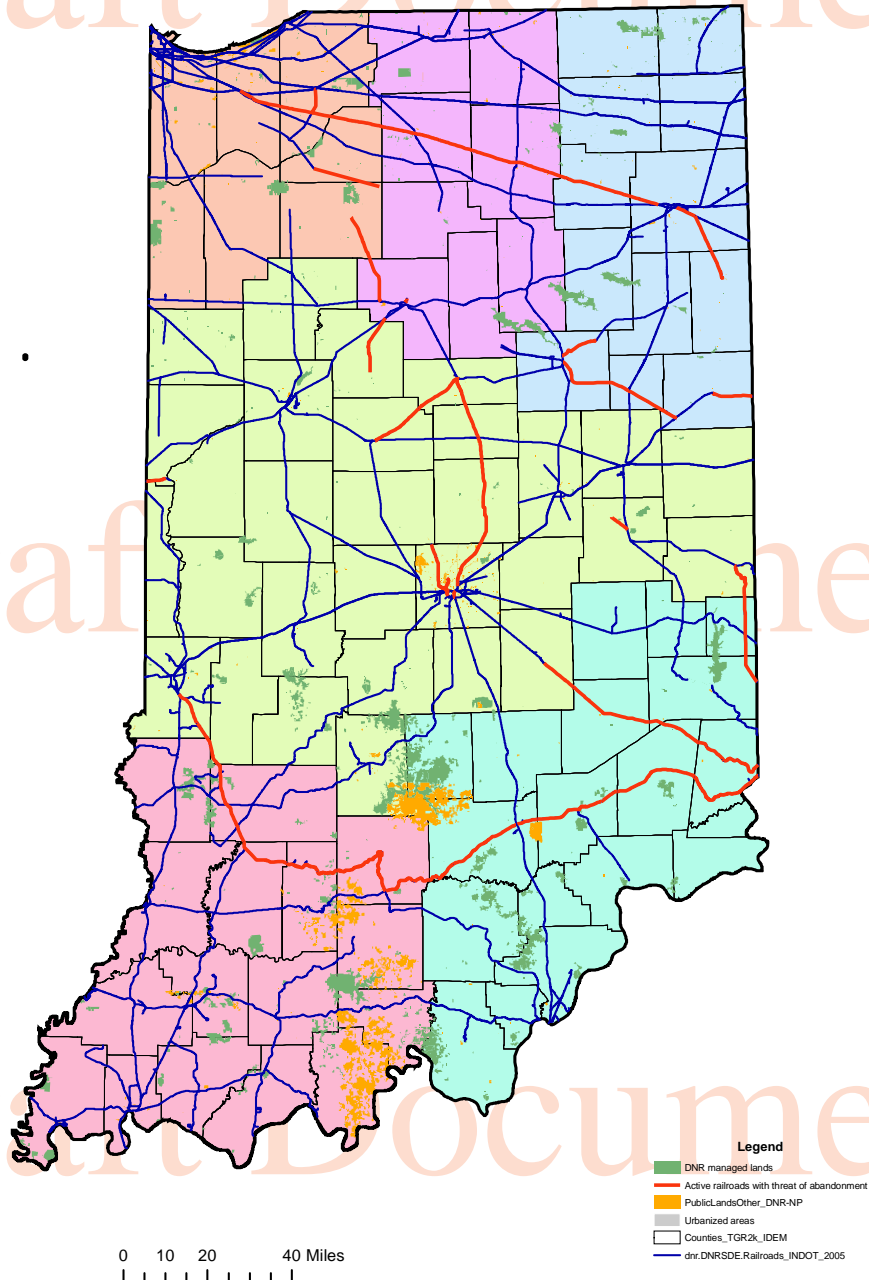
Under current property rights laws and in light of recent court rulings, if corridors are not preserved during the initial abandonment process, they are lost through reversion. While the legislature could grant funds to INDOT for specific acquisitions, this would be difficult to accomplish in the short timeframes set by the STB due to the fact that abandonments are often approved in two months. The likelihood that a line could be abandoned between legislative sessions is high. Without a source of funds, Indiana would be unable to respond.

IC 8-4.5-3-7 contemplates the use of the Transportation Corridor Fund (TCF) to implement Indiana's corridor preservation program. However, the TCF has never received an appropriation or been tied to a dedicated funding source since it was created nearly eight years ago. The TCPB encourages INDOT and IDNR to develop a process that would permit either agency to acquire rail corridors as they become available and to seek appropriate funding to support that process.

The Board believes that rail corridor preservation, whether for continues freight service, intercity passenger service, local transit, bicycle or pedestrian transportation, recreational use, or utility corridors is an important state function with

policy implications that reach beyond local or regional impacts. In light of the obstacles to state corridor preservation efforts, a system of local preservation has evolved. Nevertheless, the TCPB believes it is important that obstacles to direct state involvements are addressed so that a statewide perspective on this issue can be defined.

Active Railroads In Indiana
(INDOT, 2005)



Railbanking

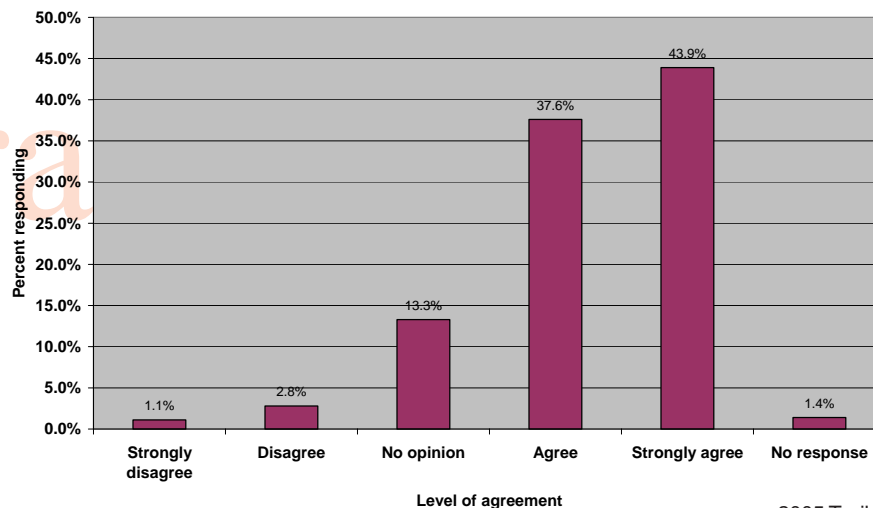
Railbanking is a way for railroad lines that have been proposed to be abandoned to be preserved by converting them to trail use for the interim. The National Trails System Act was amended in 1983 by Congress to create the railbanking program through the Surface Transportation Board (STB). At the time there was great concern about the rapid loss of the United States rail network. Many railroads are not built on land that is actually owned by the railroad company, but was acquired by an easement. The terms of the easement often require that the land continue to be used for transportation, or it will revert to the property owner. Railbanking may be a solution satisfying these conditions by keeping the corridor in tact. If future conditions (e.g. depletion of oil reserves) require relaying rails and ties or if corridors are needed for utilities, they will still be available for use.

By filing both a railbanking and public use condition request to the STB the corridor's integrity is preserved by using it as a multiple use trail. This scenario arises if the title to a rail corridor that is soon to be abandoned is in question and there is interest in the corridor being used as a trail. Many railroad rights-of-way contain easements that will revert back to

the adjacent landowner once the line is abandoned and the abandonment process is completed. The filed request will allow the STB to intervene by placing a restriction on the abandonment. The railroad company is prevented from selling off or disposing of any such property or related structures as bridges or culverts for 180 days after the abandonment is authorized.

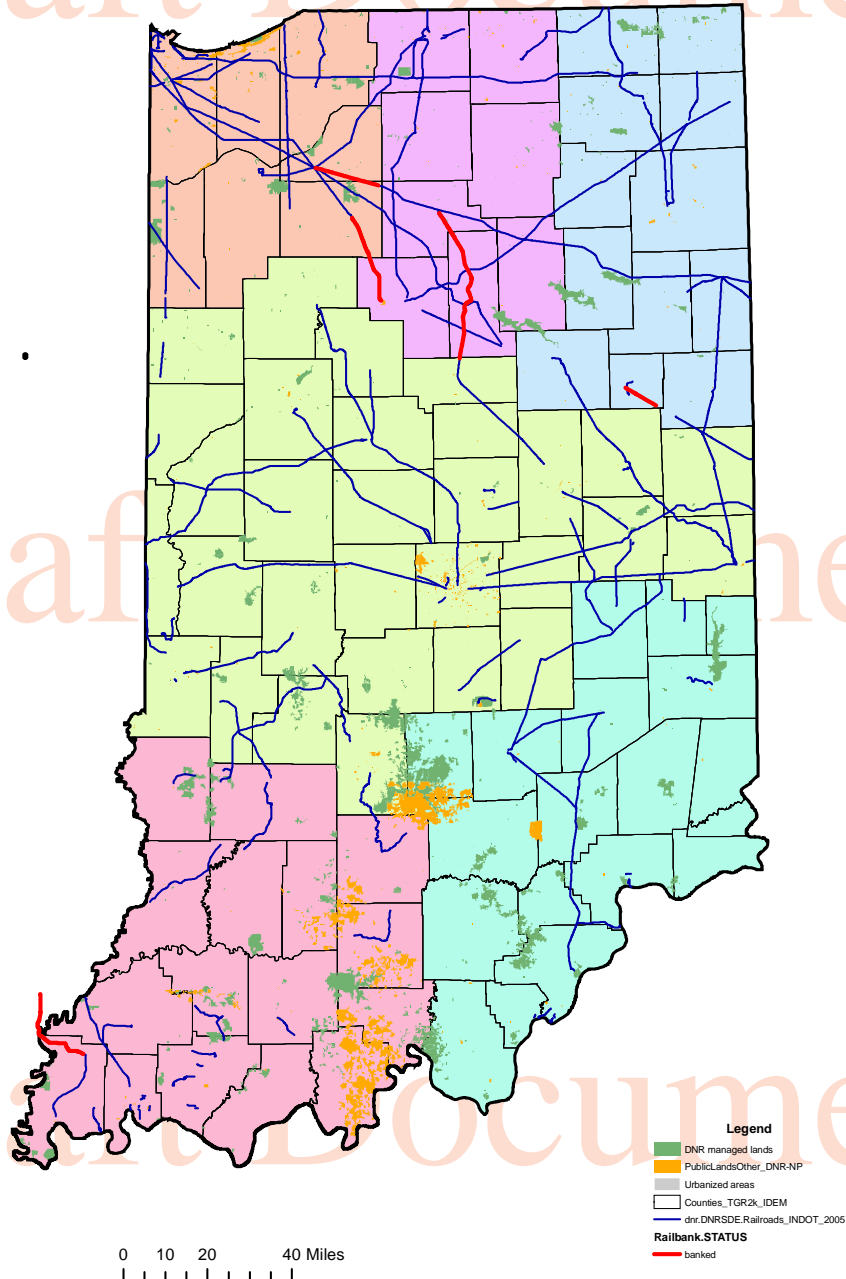
Public agencies and qualified private organizations can request railbanking. All requests must be made to Washington D.C. and the requesting agency must submit a "Statement of Willingness to Assume Financial Responsibility". The abandoning railroad company must agree to negotiate a railbanking agreement, and, therefore, must be served a copy of the request at the same time it is submitted to the STB. Once an agreement is approved, the trail manager has time to solicit support and funding to purchase the rail line. Railbanking does not guarantee a free trail since the railroads will generally want to be compensated. Likewise, the railroads are generally given the option to re-purchase the corridor if they wish to use the lines for rail traffic once again.

There should be state legislation that supports the acquisition of former railroad corridors for the development of trails.



2005 Trail Managers Issues Survey

Abandoned and Railbanked Railroad
Lines In Indiana
(INDOT, 2005)



Trails Maintenance and Management

Maintenance of trails becomes more and more of an issue as they age. With the limited amount of monies to actually create trails it is very important trail owners have a grasp of the “who, what, when, where and how” of maintaining them. The following items should be considered when developing a trail maintenance program. Additional tasks not mentioned may also be specific to a particular trail.

- Upkeep of trail signs and pavement markings
- Trimming of vegetation to maintain adequate sight distance and clearance
- Patching and grading of trail surfaces
- Cleaning of drainage structures
- Cleaning and sweeping of trail
- Inspection of trail structures
- Maintenance of lighting fixtures
- Routine trail inspection
- Litter and trash pick-up
- Snow removal
- Mowing of trail shoulders
- Timely removal of graffiti
- Repair and replacement of damaged trail benches and amenities

Maintaining trails begins with thoughtful planning followed by careful construction. If a trail is not well thought out and properly constructed the maintenance of that trail will be time consuming thus costly. Building a sustainable trail keeps maintenance to a minimum. Consider cross slope, running slope, surfacing, water crossings including bridges and construction materials being used to name a few. Alignment of the trail, examining soil types and drainage patterns are extremely important when deciding where to build a trail and how to maintain it. Consider the maintenance challenges occurring when utilizing a railroad right-of-way compared to a river greenway. In a greenway the existing plants, underlying soils and drainage each pose their trail design challenges. Additionally, flooding and aftermath cleanup need to be examined. Constructing on an abandoned railbed should offer an established subbase and fewer grade and drainage issues. Trail surface material impacts trail maintenance therefore surfacing is a main consideration.

A universally accessible trail allows use by persons with physical limitations or strollers. Creating an accessible trail requires a firm and stable surface. Popular choices for an accessible surface are asphalt/concrete or crushed limestone. Indiana has easy access to crushed limestone (73s or dusty 11s) which can be maintained firm and stable. This material is a mixture of small angular pieces which due to the various sizes packs densely when compacted. Rain and pedestrian traffic help keep the limestone screenings trail firm and stable. Using limestone screenings requires more daily maintenance. The cross slope and running slopes must be kept to a minimum. Ideally limestone screenings work best on a flat trail (2% slopes). Erosion of the surface is likely if crushed limestone is used on greater slopes. Gullies form and can washout if not maintained.

Even on flat surfaces the trail may produce small holes that will need to be filled and tamped or preferably roll compacted. Each surface choice has maintenance benefits and shortcomings. Asphalt or concrete trails are long-lasting and much more self-maintaining. However, the long-term maintenance can be costly as it ages and deteriorates. Filling cracks, sealing the surface and keeping vegetation back are important. At some point the trail will need to be replaced or resurfaced. So, having a long term funding source for trail maintenance is important. Trail design and construction impact the service life of a trail.

Creating an adequate sub base for the trail surface is critical. Such materials as geotextile fabric and vegetation barrier fabric that are used with soil have the ability to separate, filter, reinforce, protect and drain. These fabrics used with proper stone size and depth are essential when establishing a trail. The geotextile fabric can be particularly important in wetland or soft soil conditions. Recycled concrete is also an ideal sub base material for a trail. The trail surface can be compared to a house in that a solid, substantial footer or foundation is the first part of a long lasting structure.

“Beyond the Edge” of the path surface are maintenance tasks including litter pick up, graffiti removal, and the caring for the green space along the trail. When planning for trail maintenance, the

edge has many aspects to consider that affect the physical effort and fiscal cost expended. Sustainability of the trail relates to those expenses. Having a limited amount of turf grass or none may be considered. Edge plantings can include less costly design solutions than turf grasses that requiring higher maintenance costs including mowing, fertilizing and irrigation. Less mowing and watering will cut fuel and maintenance costs. Planting prairie and native plants creates a mixed species avenue for humans and wildlife. The variety of plant material attracts butterflies and birds enjoyed by trail users. In some places the edge may be restored to historical patterns of succession. To successfully integrate this method requires study and observation of the site. Trail users will need to accept this nontraditional look instead of a “mowed park”.

A restoration project requires knowledge of the historical disturbance regimes that occur in the local ecosystem. If appropriate, re-introduce some disturbances back into the ecosystem such as controlled burning or invasive species removal. It is important to understand the successional stages of the ecosystem being managed. Take advantage of any research conducted relating to historical site conditions, including soils, climate, vegetation and disturbance. Conduct a site analysis to help decide if long term maintenance should include disturbances and succession management. Remember that species composition, ecosystem structure and function are linked and change during succession.

Another consideration when planning for trail maintenance is determining who will perform the required tasks. Some not-for-profit groups such as the Cardinal Greenway and local municipalities are maintaining their trails with volunteers. A few paid staff may coordinate activity but the majority of the work is accomplished by concerned citizens who take time out of their lives to maintain the trail. Taking active ownership of the trail is one reason Cardinal Greenway is well maintained. Some not-for-profits and public entities have created “Adopt a Trail/Greenway/Path” programs where citizens may care for a section of trail to be maintained by groups, schools, businesses or organization etc. Taking a page from local soil and water conservation districts, centrally located special use

trail equipment in INDOT districts around the state could be loaned to qualified operators for maintenance support by volunteers and weekend maintenance events. Trail systems would be maintained while costs are offset through equipment sharing.

In other instances the Park and Recreation department will maintain the trail completely or use volunteers, work release program, prison labor, or a combination of the above. Some Department of Public Works or Street Departments, depending on the trail location and jurisdiction control, will maintain trails. City or county highway and road departments have become more active in trail maintenance due to direct correlation between trails and transportation. As they maintain the road, why not care for the trail that runs along the road? Where trails are built on levees, some levee authorities maintain them. Trail edge and/or the trail surface may be maintained by utility companies where their services exist under or over a trail. The money from the lease or easement from such utilities could be used to maintain the trail. Other entities managing trails establish maintenance endowments that ensure that both short term and long term maintenance needs will be met.

Building trails for Indiana trail users and visitors adds a valuable outdoor recreation resource to our communities. However, the sustainability and usefulness of the trail depends on the stewardship of the trail. The commitment to the long term maintenance of the trail is as important as the creation of the trail. Thoughtful planning, careful construction and lasting maintenance of trails will help insure an enjoyable, healthy and pleasing resource for everyone.

Chapter 5 Supply and Demand for Trails

This chapter provides information describing the supply of trails available in Indiana. The demand for trails is also included in this section so that the reader can assess for themselves the ability of the supply of trails in Indiana to meet the demand.

The Indiana Trails Inventory

Many entities at the federal, state and local level work to provide trails in Indiana. In 1993 the Department of Natural Resources conducted a survey of all local park and recreation, federal and DNR agencies to determine the supply of publicly owned and managed trails in Indiana. Since then, DNR has maintained the trails inventory through input from local providers, and by mapping trails in house. The DNR, Division of Outdoor Recreation Streams and Trails section continues to survey trail managing entities and map all open and planned trails in Indiana. This data is maintained in a GIS system within the department. It is available to the public for viewing on the web at <http://igs.indiana.edu/arcims/statewide/index.html> through the Indiana Geologic Survey.

This inventory has provided the data used to create the majority of the maps presented in this plan. This system is a work in progress. Since the number of trails in Indiana is growing and more and more people are getting involved in developing trails, those individuals who maintain this system are having a hard time keeping up.

None the less, this inventory is a valuable tool for trail advocates and managers to use to create more trails; connect trails to destinations; and plan for alternative transportation corridors. Trail managers can help keep this tool up to date by keeping the Division of Outdoor Recreation informed about their trails, both developed and planned.

This inventory includes those trails that are currently open, under development and planned. Originally, trails included in this inventory are those that were at least ½ mile in length. However as trail entities grow more sophisticated in the way they manage and map their trails, trails that have been mapped by the local entities have been incorporated regardless of their length. This inventory also tracks the federal and state dollars that have funded individual segments of trails.

All trails inventoried have been identified through some type of local planning effort. These trails, existing, under development and planned, are those that can be found in local plans or those that have been submitted as potential grant projects. Currently, trails that have been identified through regional metropolitan planning charrettes and those corridors that have not progressed beyond the broad concept stage are not included. There are plans to add additional categories in the inventory in order to include these trails as part of a statewide comprehensive inventory of trails and potential trails in Indiana.



Indiana Tails Inventory Trails by County by Trail Use

County Name	Hiking Trails	Equestrian Trails	Bicycle Trails	Mountain Bike Trails	Wheelchair Accessible Trails	Nordic Ski Trails	Water Trails	Snowmobile Trails	Total for all Trails in County
	# of Trails / # of Trail Miles								
Adams	4/2.7	0/0	0/0	1/1.1	3/1.6	0/0	0/0	0/0	4/2.7
Allen	12/38.17	0/0	12/38.17	0/0	12/38.17	2/12.2	0/0	1/25.4	13/63.57
Bartholomew	4/26.65	0/0	4/26.65	0/0	4/26.65	0/0	0/0	0/0	4/26.65
Benton	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Blackford	1/8.6	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/8.6
Boone	10/20.1	0/0	7/15.75	2/1.25	7/15.75	1/2.0	0/0	0/0	10/20.1
Brown	37/97.6	33/100.9	0/0	2/10.1	4/1.1	0/0	0/0	0/0	61/165.9
Carroll	12/11.6	0/0	11/10.9	1/0.7	0/0	12/11.6	1/25.8	0/0	13/37.4
Cass	3/17.5	0/0	3/7.5	0/0	3/7.5	1/1.3	0/0	0/0	3/18.0
Clark	25/56	3/65.4	8/20.4	5/7.9	8/18.75	0/0	1/4.0	0/0	30/125.9
Clay	3/2.25	0/0	0/0	0/0	0/0	0/0	0/0	0/0	3/2.25
Clinton	1/0.8	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/0.8
Crawford	6/24.5	3/33.8	2/2.4	2/19.6	2/2.4	1/1.8	0/0	0/0	7/38.7
Daviess	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Dearborn	2/2.0	0/0	2/2.0	0/0	2/2.0	0/0	0/0	0/0	2/2.0
Decatur	1/1.7	0/0	1/1.7	0/0	1/1.7	0/0	0/0	0/0	1/1.7
Dekalb	3/4.4	0/0	2/4.1	0/0	3/4.4	0/0	0/0	0/0	3/4.4
Delaware	6/28.95	1/10.3	6/28.95	0/0	6/28.95	2/22.7	0/0	0/0	7/39.25
Dubois	13/31.1	1/2.4	5/13.4	6/11.2	6/15.4	1/0.1	0/0	0/0	14/33.1
Elkhart	21/61.5	1/10.9	11/35.7	5/17.2	10/34.45	8/31.85	1/25.7	2/62.75	25/151.2
Fayette	3/12.3	0/0	1/11.0	0/0	1/11.0	0/0	0/0	0/0	3/12.3
Floyd	8/12.9	0/0	8/12.9	0/0	7/12.0	0/0	0/0	0/0	8/12.9
Fountain	7/7.3	0/0	3/5.2	0/0	4/5.7	0/0	0/0	0/0	7/7.3
Franklin	13/38.95	0/0	1/3.8	4/11.0	1/0.7	0/0	0/0	0/0	13/38.95
Fulton	1/5.3	0/0	1/5.3	0/0	1/5.3	0/0	0/0	0/0	1/5.3
Gibson	1/0.7	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/0.7
Grant	6/19.95	1/3.0	9/19.95	0/0	6/19.95	2/10.6	0/0	0/0	6/19.95
Greene	7/17.6	3/5.2	0/0	1/8.0	0/0	0/0	0/0	0/0	7/17.6
Hamilton	69/201.9	0/0	65/194	2/4.4	66/197.5	1/2.5	0/0	0/0	69/201.9
Hancock	2/6.92	0/0	2/6.92	0/0	2/6.92	1/3.0	0/0	0/0	2/6.92
Harrison	17/44.8	12/75.3	7/5.3	0/0	7/5.3	0/0	1/43.7	0/0	30/163.8
Hendricks	27/64.55	1/20.0	23/60.15	0/0	24/60.65	1/20.0	0/0	0/0	27/64.55
Henry	11/33.25	0/0	5/28.0	0/0	5/28.0	1/3.0	0/0	0/0	11/33.25
Howard	5/7.0	0/0	5/7.0	0/0	5/7.0	0/0	0/0	0/0	5/7.0
Huntington	19/68.8	3/1.3	0/0	2/22.5	0/0	6/11.55	0/0	4/27.5	20/69.3
Jackson	27/63.65	6/39.7	1/1.9	10/38.1	2/2.65	0/0	0/0	0/0	29/76.05
Jasper	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Jay	1/3.1	0/0	1/3.1	0/0	1/3.1	0/0	0/0	0/0	1/3.1
Jefferson	12/16.35	0/0	2/3.25	1/0.5	2/3.25	2/3.25	0/0	0/0	12/16.35
Jennings	9/16.8	0/0	0/0	0/0	0/0	0/0	0/0	0/0	9/16.8
Johnson	9/11.75	5/3.9	8/11.0	0/0	5/9.05	4/2.9	0/0	0/0	9/11.75
Knox	2/6.45	0/0	1/5.75	0/0	2/6.45	0/0	0/0	0/0	2/6.45
Kosciusko	5/22.8	0/0	5/22.8	0/0	5/22.8	0/0	0/0	0/0	5/22.8
LaGrange	4/5.7	1/3.3	1/3.3	0/0	1/3.3	1/3.3	0/0	0/0	4/5.7
Lake	36/107.85	0/0	29.88.95	4/16.0	29/95.55	8/29.7	0/0	0/0	36/107.85
LaPorte	14/16.9	1/3.8	7/9.9	2/4.7	8/10.1	6/7.3	0/0	0/0	14/16.9
Lawrence	8/29.4	1/19.1	0/0	1/19.1	0/0	0/0	0/0	0/0	8/29.4
Madison	5/9.3	0/0	4/8.0	1/1.3	4/8.0	0/0	0/0	0/0	5/9.3

County Name	Hiking Trails	Equestrian Trails	Bicycle Trails	Mountain Bike Trails	Wheelchair Accessible Trails	Nordic Ski Trails	Water Trails	Snowmobile Trails	Total for all Trails in County
	# of Trails / # of Trail Miles								
Marion	29/109.73	2/5.1	26/105.3	2/9.3	26/105.3	9/46.83	1/10.32	0/0	129.05
Marshall	3/5.4	0/0	2/5.1	0/0	2/5.1	0/0	0/0	0/0	3/5.4
Martin	5/15.35	0/0	2/4.3	1/6.8	2/4.3	0/0	0/0	0/0	5/15.35
Miami	8/41.2	0/0	4/35.5	0/0	4/35.1	3/5.3	0/0	0/0	8/41.2
Monroe	23/88.64	2/30.6	7/8.39	2/4.6	5/6.49	0/0	0/0	0/0	23/88.64
Montgomery	17/17.4	0/0	6/7.2	0/0	6/7.2	2/3.0	1/2.3	0/0	18/19.7
Morgan	1/2.5	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/2.5
Newton	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Noble	11/14.2	0/0	0/0	2/3.1	1/2.2	3/4.1	0/0	0/0	11/14.2
Ohio	1/0.8	0/0	1/0.8	0/0	1/0.8	0/0	0/0	0/0	1/0.8
Orange	10/57.1	4/44.95	1/8.1	4/44.95	1/8.1	1/8.1	1/9.0	0/0	11/66.1
Owen	14/29.3	3/10.2	0/0	1/7.0	1/0.6	2/2.0	0/0	0/0	15/31.3
Parke	18/43.1	1/20.2	1/20.2	0/0	1/20.2	1/20.2	2/10.4	0/0	20/53.5
Perry	9/77.8	3/44.8	0/0	4/50.7	0/0	0/0	0/0	0/0	10/79.0
Pike	4/9.2	3/7.7	1/1.5	0/0	1/1.5	0/0	0/0	0/0	4/9.2
Porter	27/71.2	1/6.4	4/14.7	2/9.6	4/14.7	10/31.0	0/0	0/0	27/71.2
Posey	8/20.8	1/1.5	2/15.8	0/0	1/12.3	0/0	0/0	0/0	10/25.8
Pulaski	14/37.9	6/14.5	0/0	0/0	0/0	4/8.3	0/0	0/0	14/37.9
Putnam	14/45.45	1/18.0	11/40.4	1/3.5	13/44.65	3/23.4	0/0	0/0	15/45.95
Randolph	2/4.0	0/0	2/4.0	0/0	2/4.0	2/4.0	0/0	0/0	2/4.0
Ripley	9/25.7	5/17.9	0/0	0/0	0/0	0/0	0/0	0/0	9/25.7
Rush	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
St. Joseph	18/31.3	3/8.4	11/23.9	1/0.6	10/20.6	8/13.3	0/0	1/73.0	22/112.5
Scott	9/34.75	1/23.8	6/17.75	0/0	6/17.75	0/0	0/0	0/0	10/58.55
Shelby	3/2.4	0/0	3/2.4	0/0	3/2.4	0/0	0/0	0/0	3/2.4
Spencer	11/16.7	0/0	1/1.5	0/0	0/0	0/0	0/0	0/0	12/18.2
Starke	1/12.5	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/12.5
Steuben	17/29.25	0/0	5/15.7	1/2.1	5/15.7	9/12.9	0/0	1/23.0	18/52.25
Sullivan	7/18.4	5/14.9	0/0	0/0	0/0	0/0	0/0	0/0	7/18.4
Switzerland	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Tippecanoe	17/34.9	0/0	14/22.9	0/0	10/18.35	3/13.3	1/23.1	0/0	18/58.0
Tipton	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Union	9/21.25	1/9.0	1/0.0	0	1/0.0	0/0	0/0	0/0	9/21.25
Vanderburgh	9/38.9	0/0	9/38.9	0/0	9/38.9	0/0	0/0	0/0	9/38.9
Vermillion	2/3.2	0/0	2/3.2	0/0	2/3.2	0/0	0/0	0/0	2/3.2
Vigo	3/11.8	0/0	3/11.8	0/0	3/11.8	0/0	0/0	0/0	3/11.8
Wabash	11/41.8	4/39.4	5/9.75	0/0	6/10.5	2/3.7	0/0	2/14.6	12/53.6
Warren	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Warrick	2/5.25	0/0	2/5.25	0/0	2/5.25	0/0	0/0	0/0	2/5.25
Washington	5/69.8	1/12.7	2/17.2	0/0	2/17.2	0/0	1/3.3	0/0	7/85.8
Wayne	7/27.3	1/8.4	3/21.5	0/0	3/21.5	3.21.5	0/0	0/0	7/27.3
Wells	9/18.0	0/0	3/5.0	0/0	3/5.0	5/13.0	0/0	0/0	9/18.0
White	2/6.2	0/0	1/5.2	0/0	1/5.2	0/0	0/0	0/0	2/6.2
Whitley	2/3.0	0/0	1/2.0	0/0	1/2.0	1/2.0	0/0	0/0	2/3.0

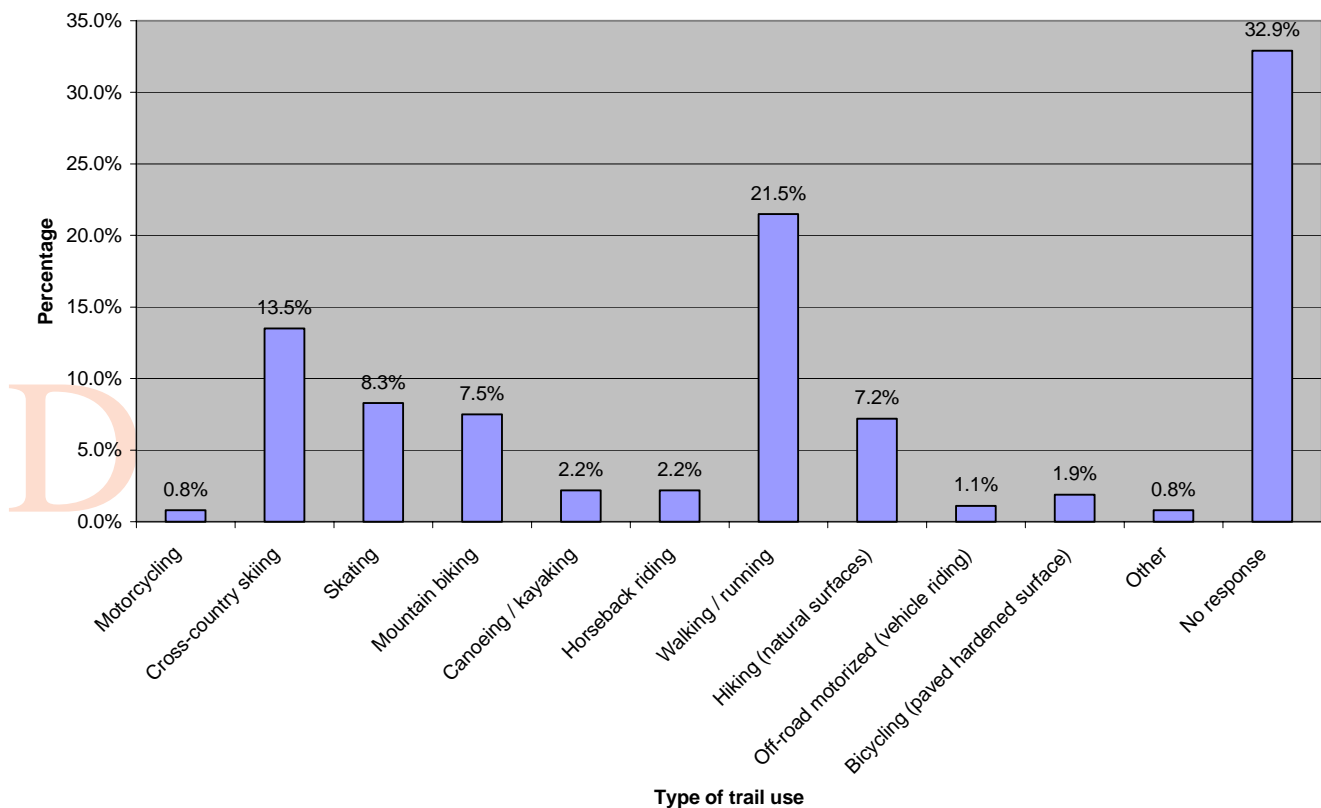
This inventory includes trails that are considered multi-use trails and inventoried as of January 2006. In addition to tracking milage for individual trails, the milage is tracked for individual uses and therefore, the summed totals for the individual uses does not equal the total miles available for a given county.

Total Trail Milage in Indiana (built, proposed and visionary)

Trail miles open to the public	2074
Trail miles proposed to be built (other than Visionary trails)	934
Trail miles currently being developed	136
Visionary Trail Miles (Does not include Wabash River or The Knobstone Trail)	1002
Total Trail Opportunity Miles in Indiana	4146

Draft Document






What is the type of Trail use your system provides?




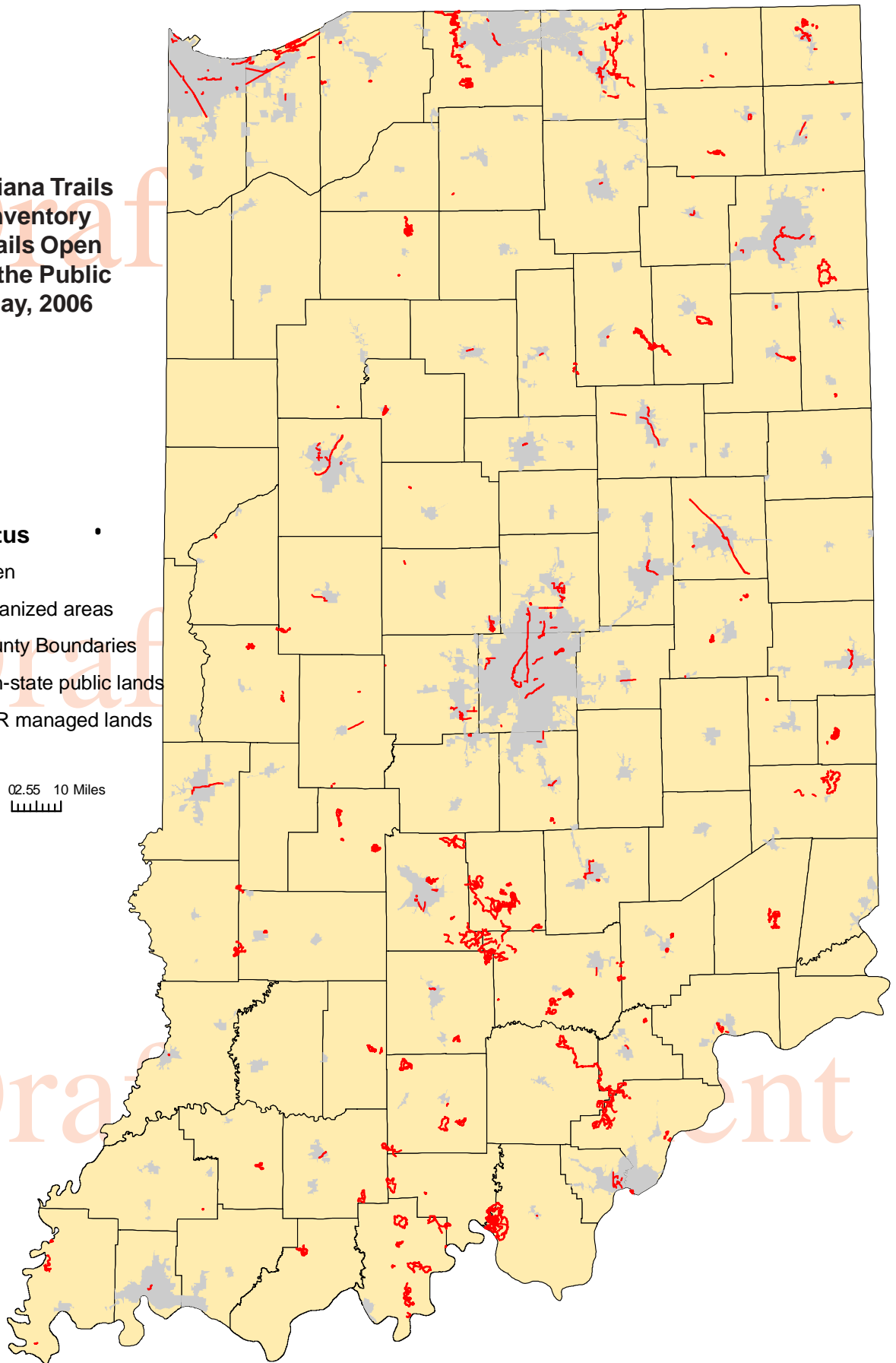
**Indiana Trails
Inventory
Trails Open
to the Public
May, 2006**

Legend

Trail Status

-  Open
-  Urbanized areas
-  County Boundaries
-  Non-state public lands
-  DNR managed lands






02.55 10 Miles





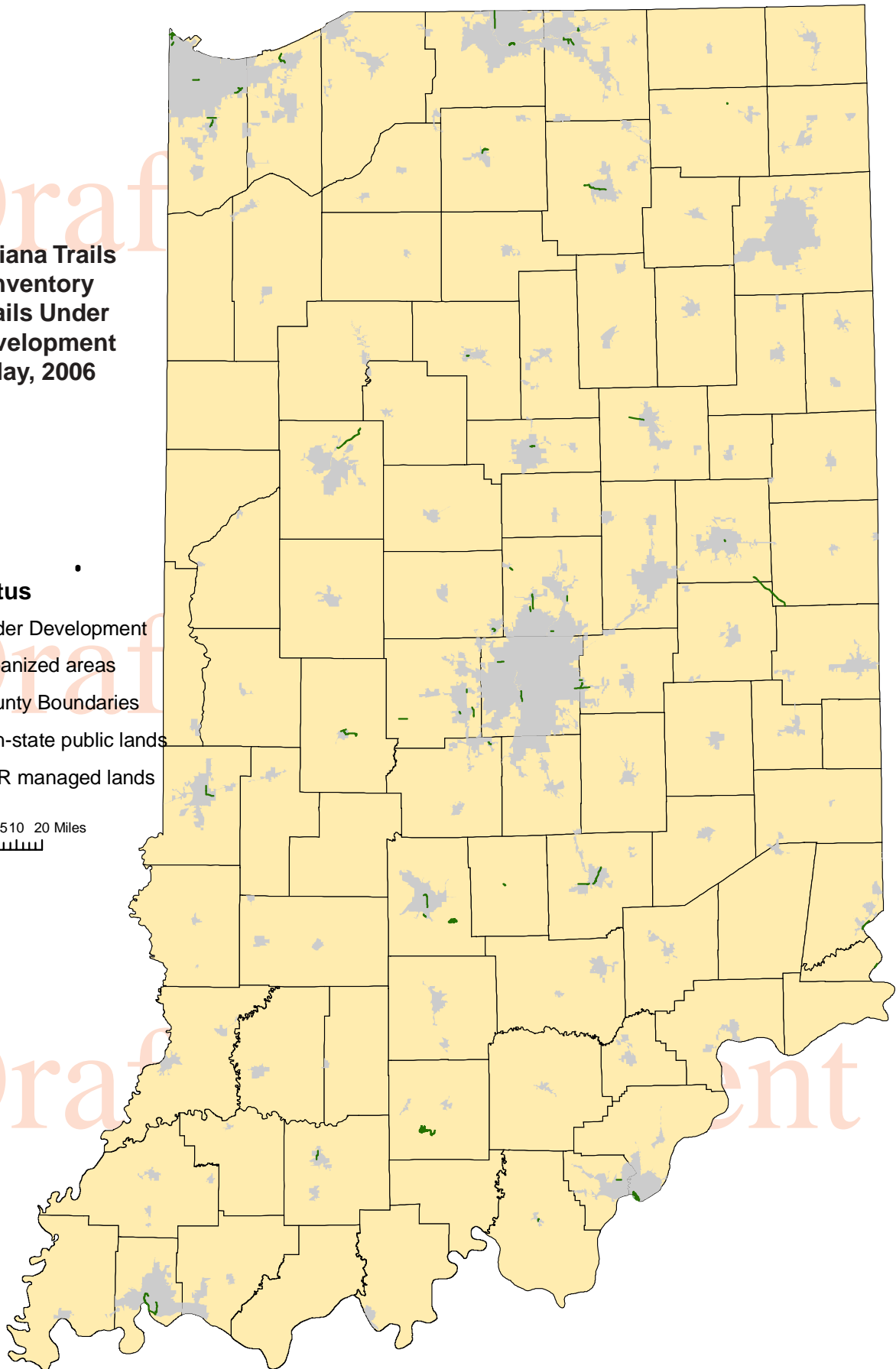
**Indiana Trails
Inventory
Trails Under
Development
May, 2006**

Legend

Trail Status

-  Under Development
-  Urbanized areas
-  County Boundaries
-  Non-state public lands
-  DNR managed lands






0 5 10 20 Miles





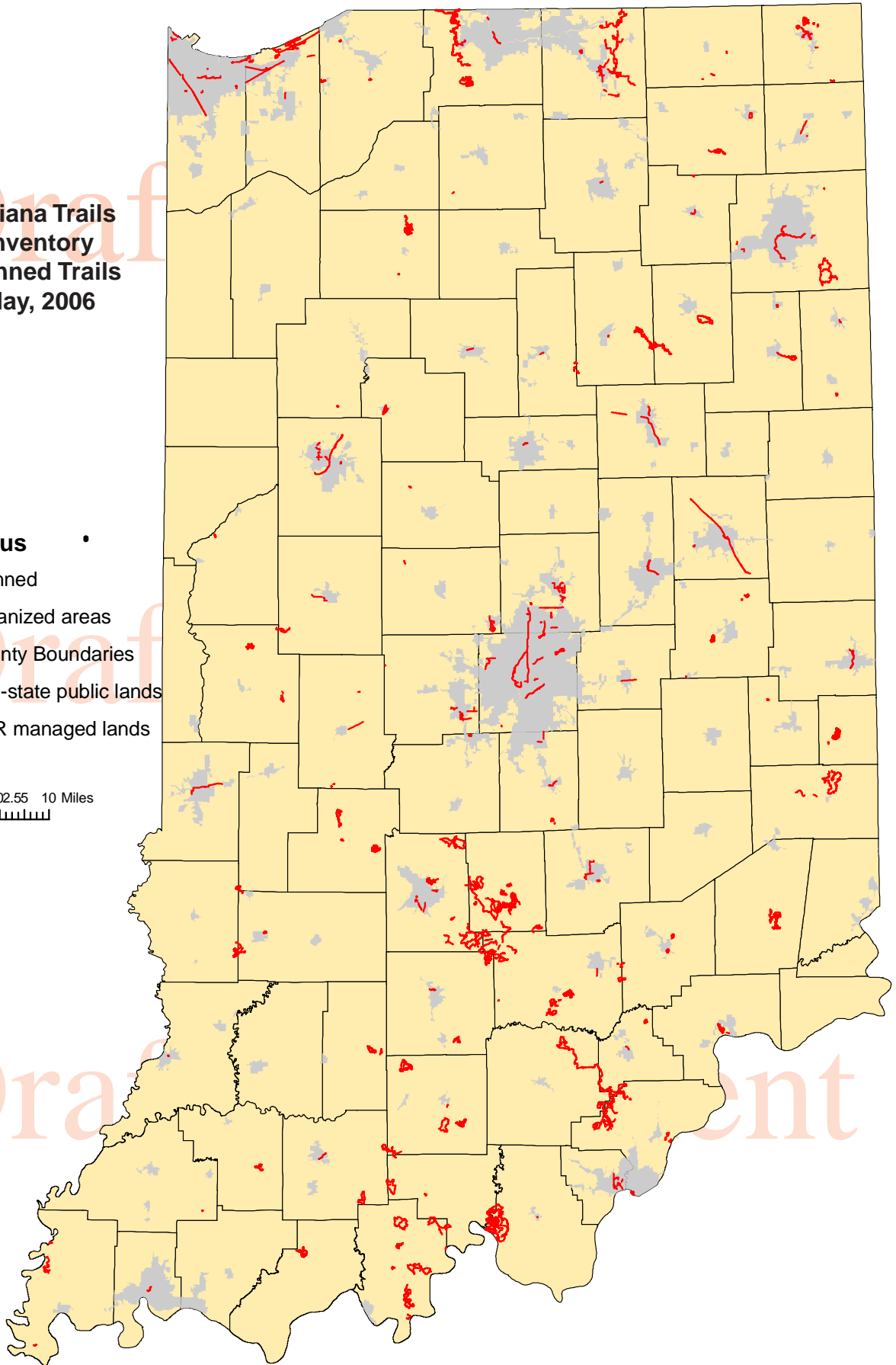
**Indiana Trails
Inventory
Planned Trails
May, 2006**

Legend

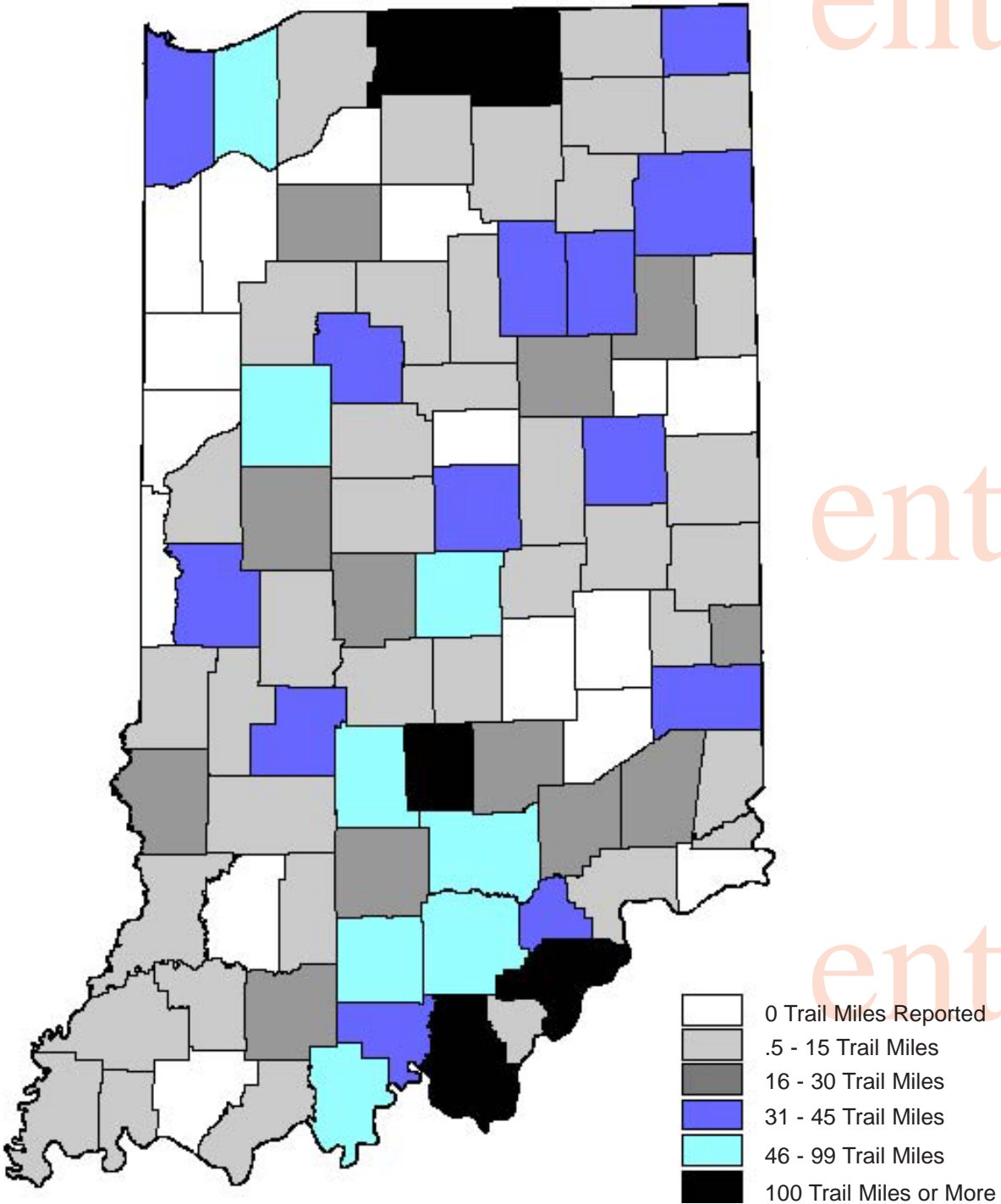
Trail Status

-  Planned
-  Urbanized areas
-  County Boundaries
-  Non-state public lands
-  DNR managed lands

02.55 10 Miles


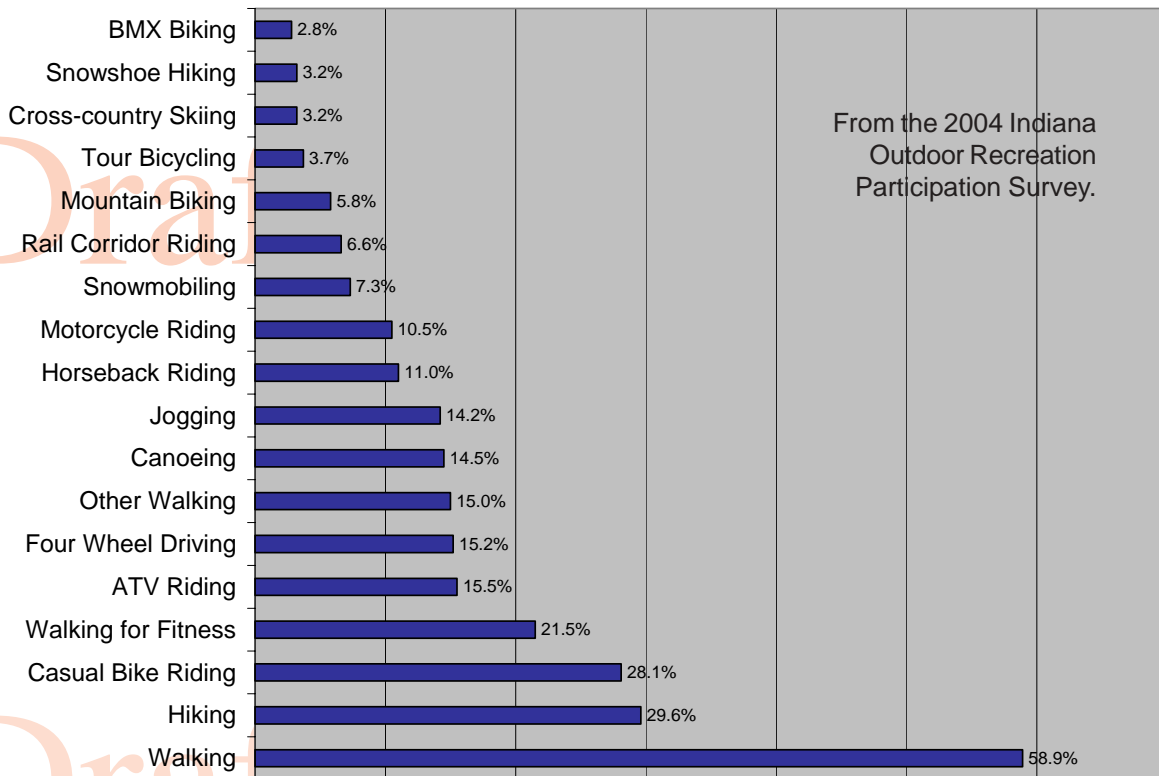


Total Number of Trail Miles by County

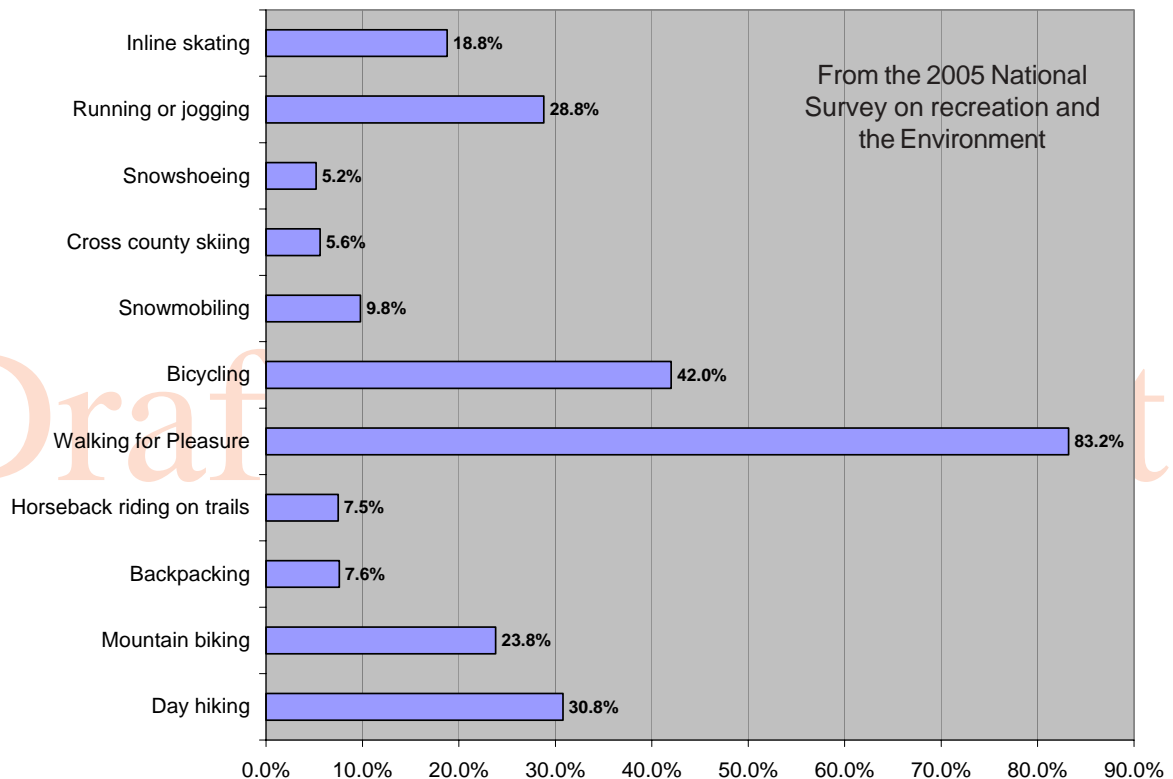


Inventory of Trails in Indiana (as reported by responding agencies in December 2005)

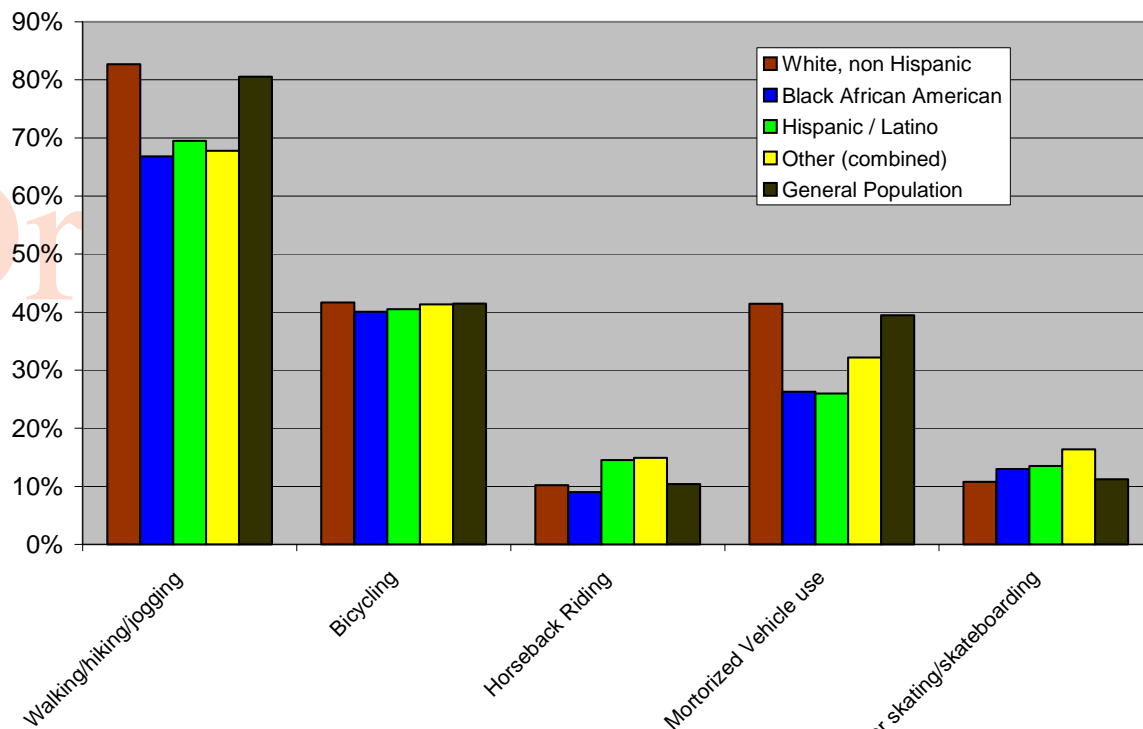
Regular Participation in Trail Related Activities as Reported by Indiana Residents in 2004



Midwest market trail related participation. (Includes Indiana, illinois, kentucky, Michigan, Ohio and Wisconsin)

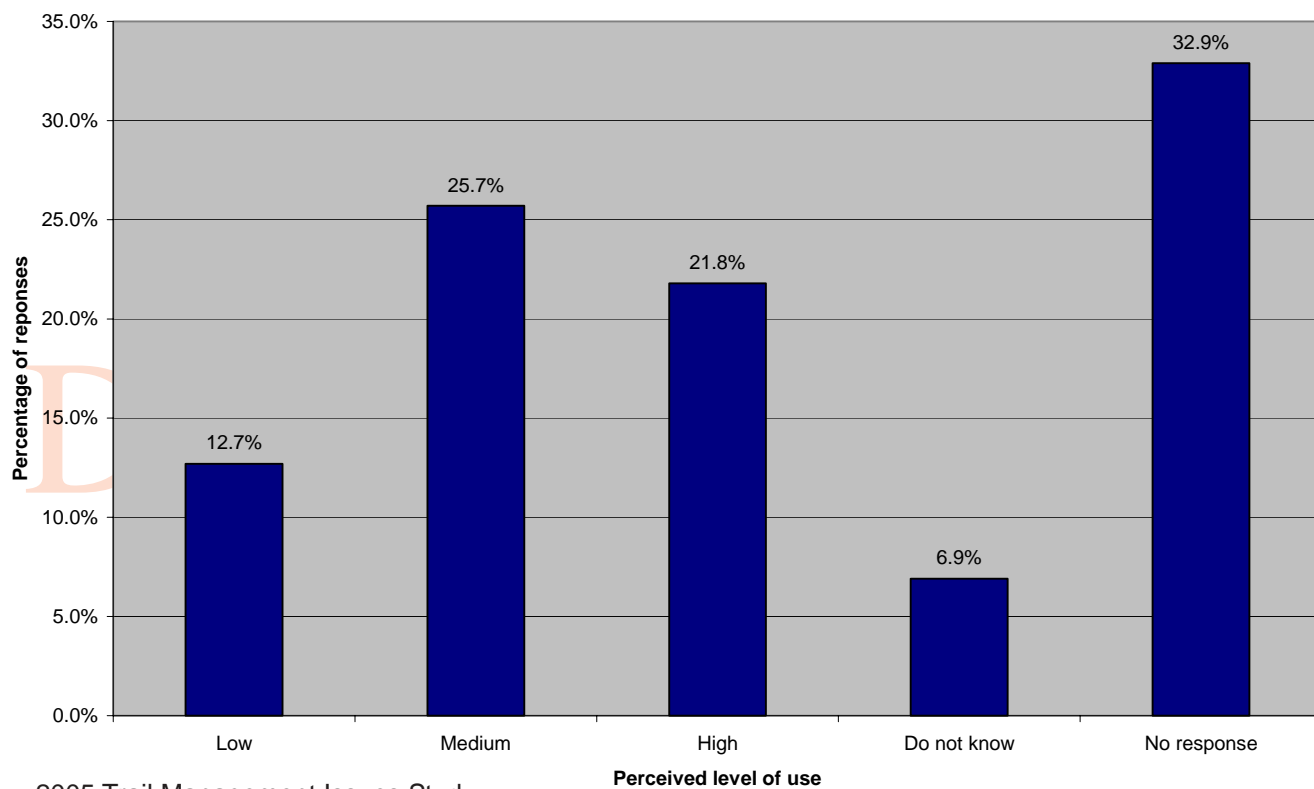


Comparison of Participation Rates by Race

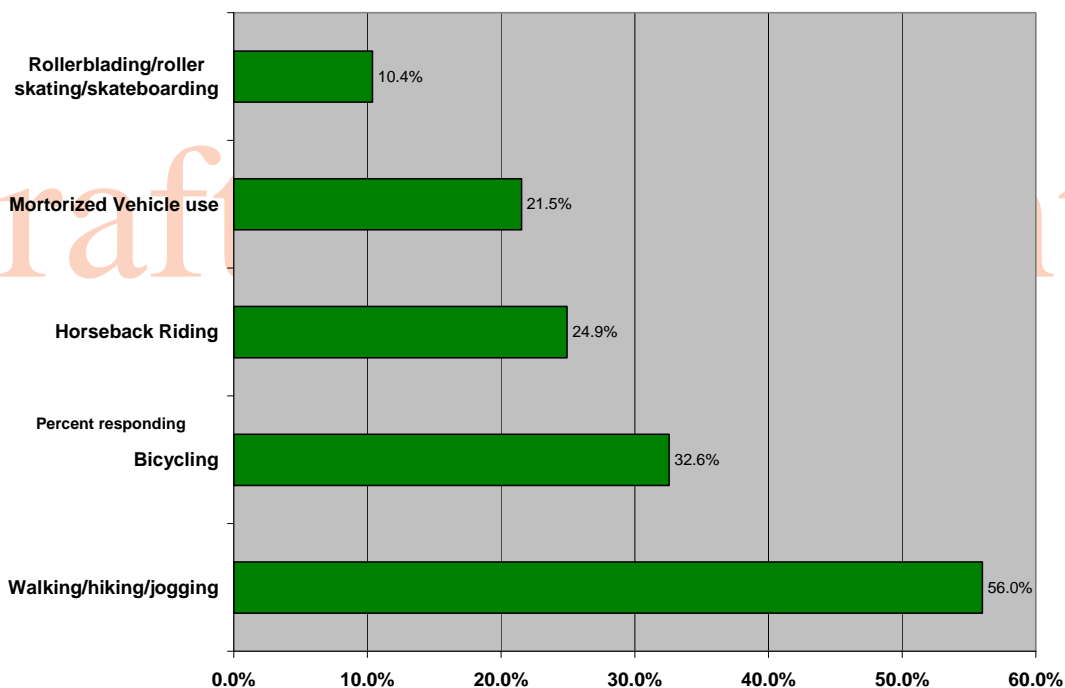


From the 2004 Indiana Outdoor Recreation Participation Survey.

What is your perceived rate of trail use?

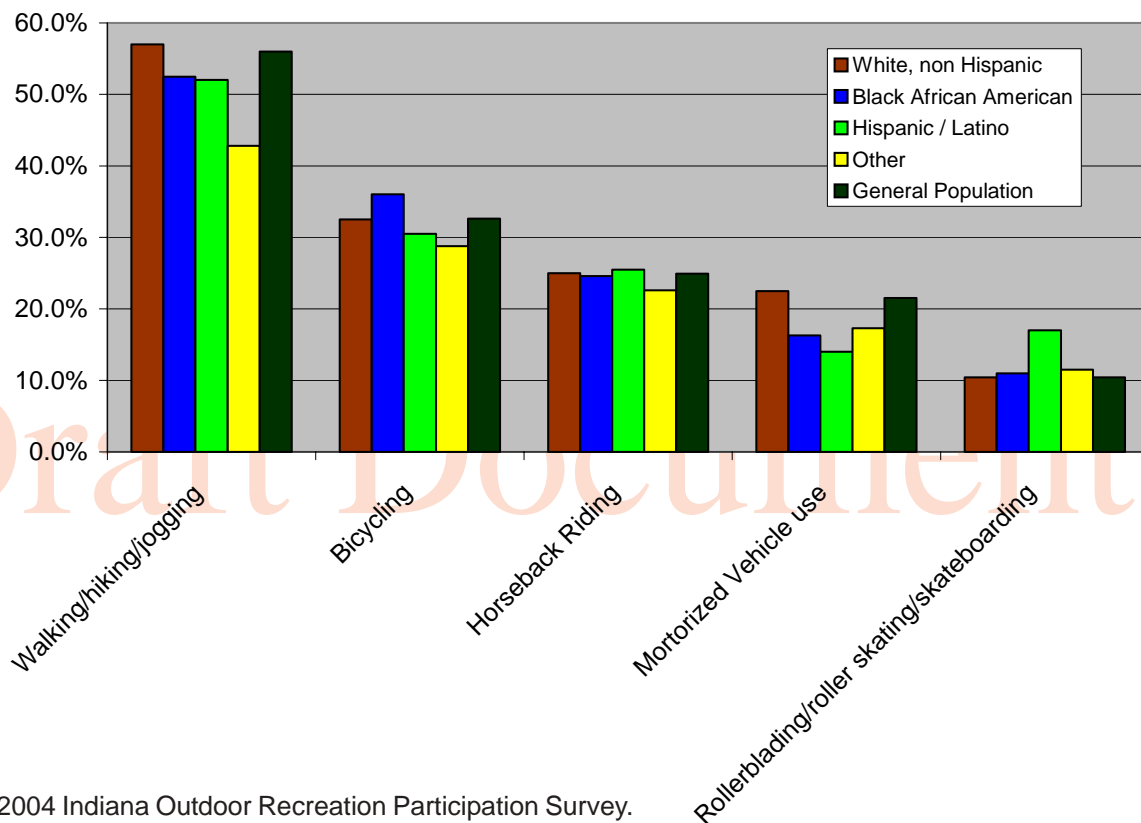


Please pick which outdoor recreation activities you would be MOST likely to participate in if adequate facilities were available. (Multiple Responses)



From the 2004 Indiana Outdoor Recreation Participation Survey.

Please pick which outdoor recreation activities you would be MOST likely to participate in if adequate facilities were available. (Multiple Responses)



From the 2004 Indiana Outdoor Recreation Participation Survey.

Indiana Trails User Study

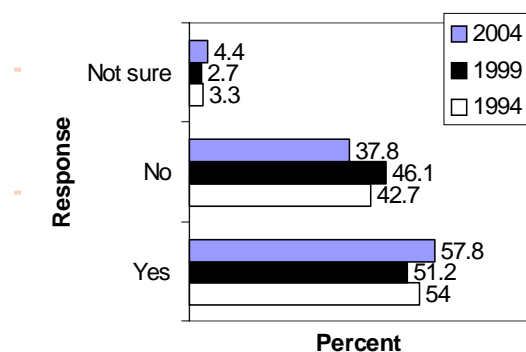
The Indiana Department has conducted a trails user study every 5 years since 1993. This survey is conducted using touch screen technology and samples a cross section of Hoosiers throughout the state. This survey collects standard demographic information and asks residents about their use of trails and their attitudes regarding some of the issues surrounding trail use in Indiana.

Some of the major findings include:

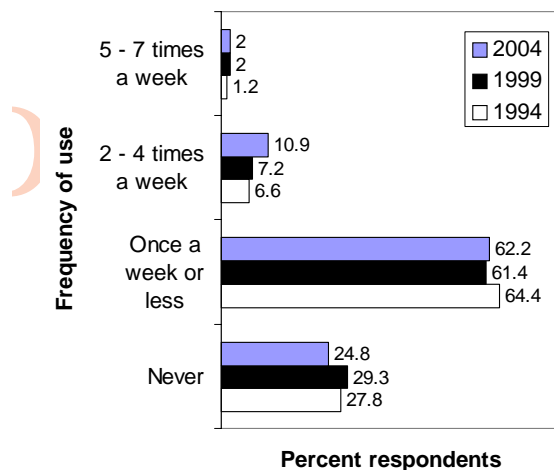
- The number of people who have use a designated trail has slightly increased through time.
- The use of trails for walking, running, hiking and bicycling is increasing while using trails for horseback riding and mountain biking is decreasing.
- The amount of money individuals spend annually on equipment for their chosen trail activity has remained fairly constant with the majority spending less than \$300.00.
- 43% of those who used a designated trail spent more than \$31.00 on their most recent day trip on a trail in 2004.
- The regular use of designated trails appears to not yet be pervasive with 62% reporting that they used a trail less than once a week and 25% reporting they never used a designated trail.
- Pleasure and relaxation is still by far most often selected as the reason for using a trail (82% in 2004) while using trails for health and fitness is increasing slightly (53% in 2004).
- The top three reasons stated for not using trails more often were lack of time, trails located too far away and lack of knowledge of where trails are located.
- 37% of the people polled indicated they would be willing to pay a fee to use designated trails if the money was spent on management and upkeep of trails in their local area.
- Of the issues presented, respondents placed the highest importance on developing trails close to home, publishing trail map guides, and linking together existing trails.
- Preference for using general taxes to support trails appears to be increasing since 1993 while preference for using other sources of funding appear to be decreasing or unchanged.



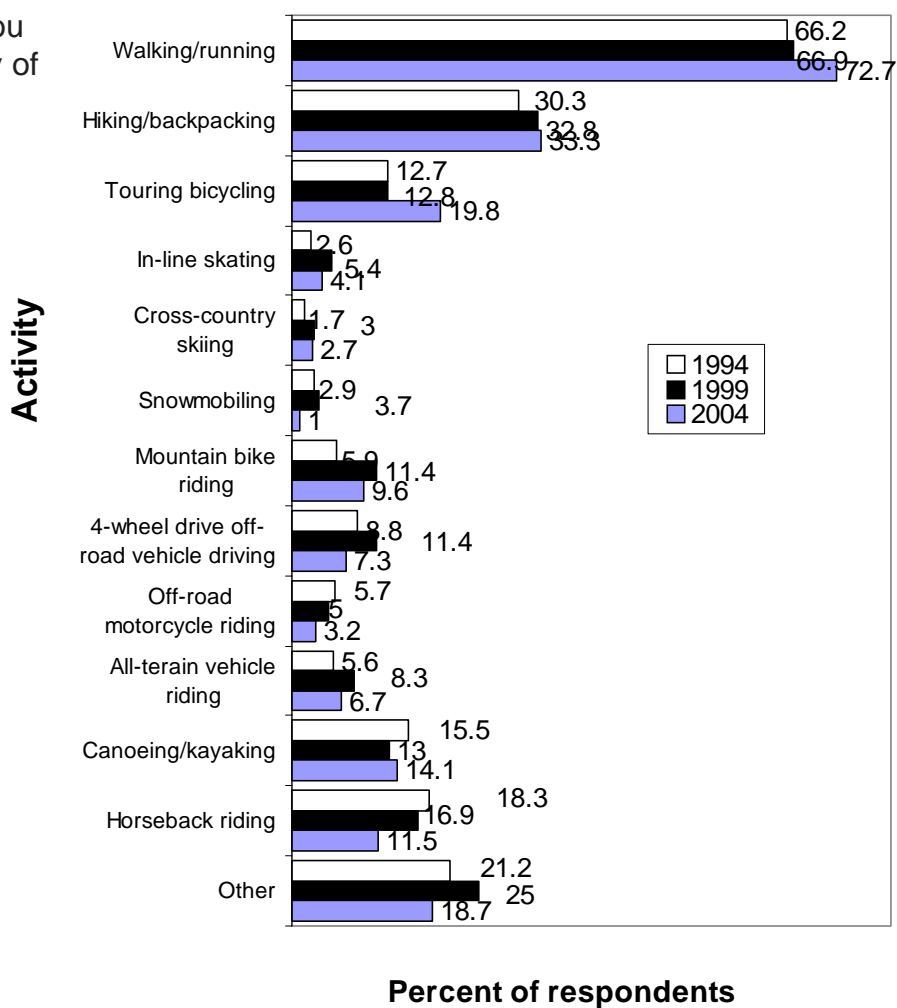
In the past twelve months have you used a designated recreational trail?



How often do you use designated recreational trails?



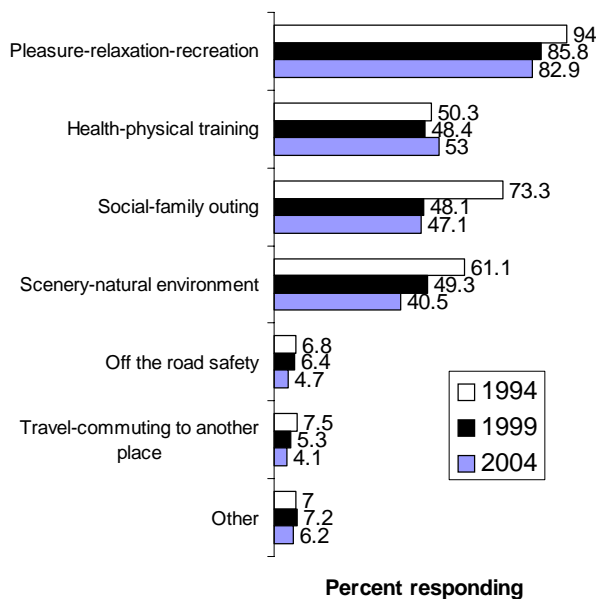
What trail activities do you participate in the majority of the time (multiple responses allowed)?



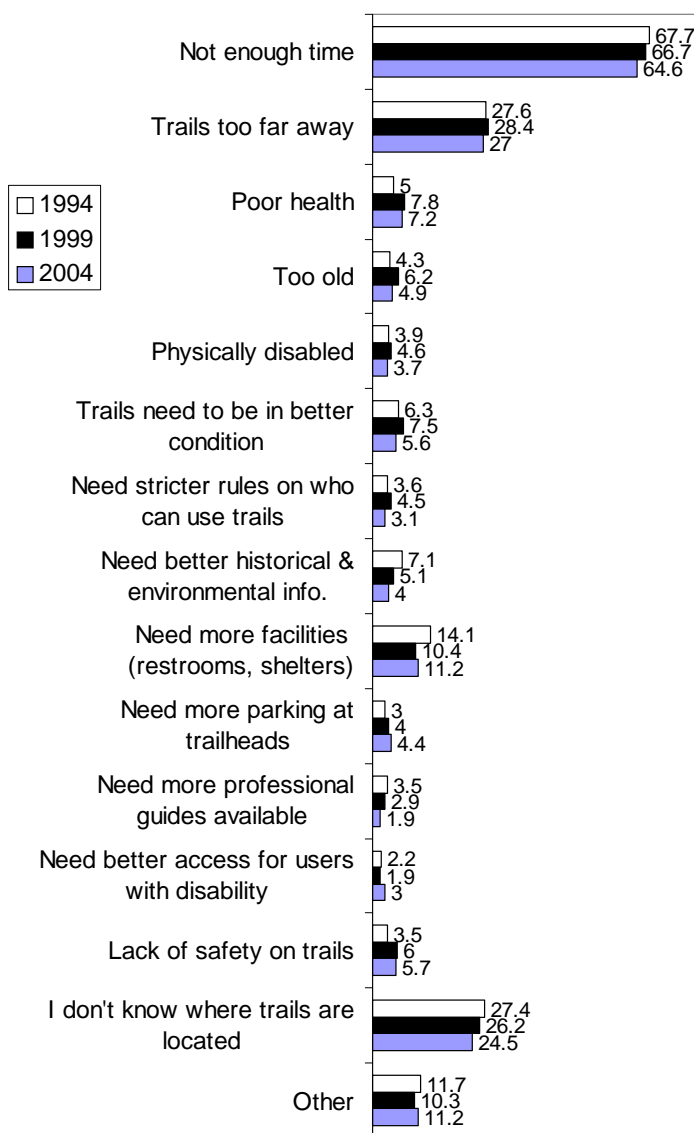
What are your reasons for using these trails? (Not asked of those who never use trails; multiple responses allowed)

Draft D

Reasons for use



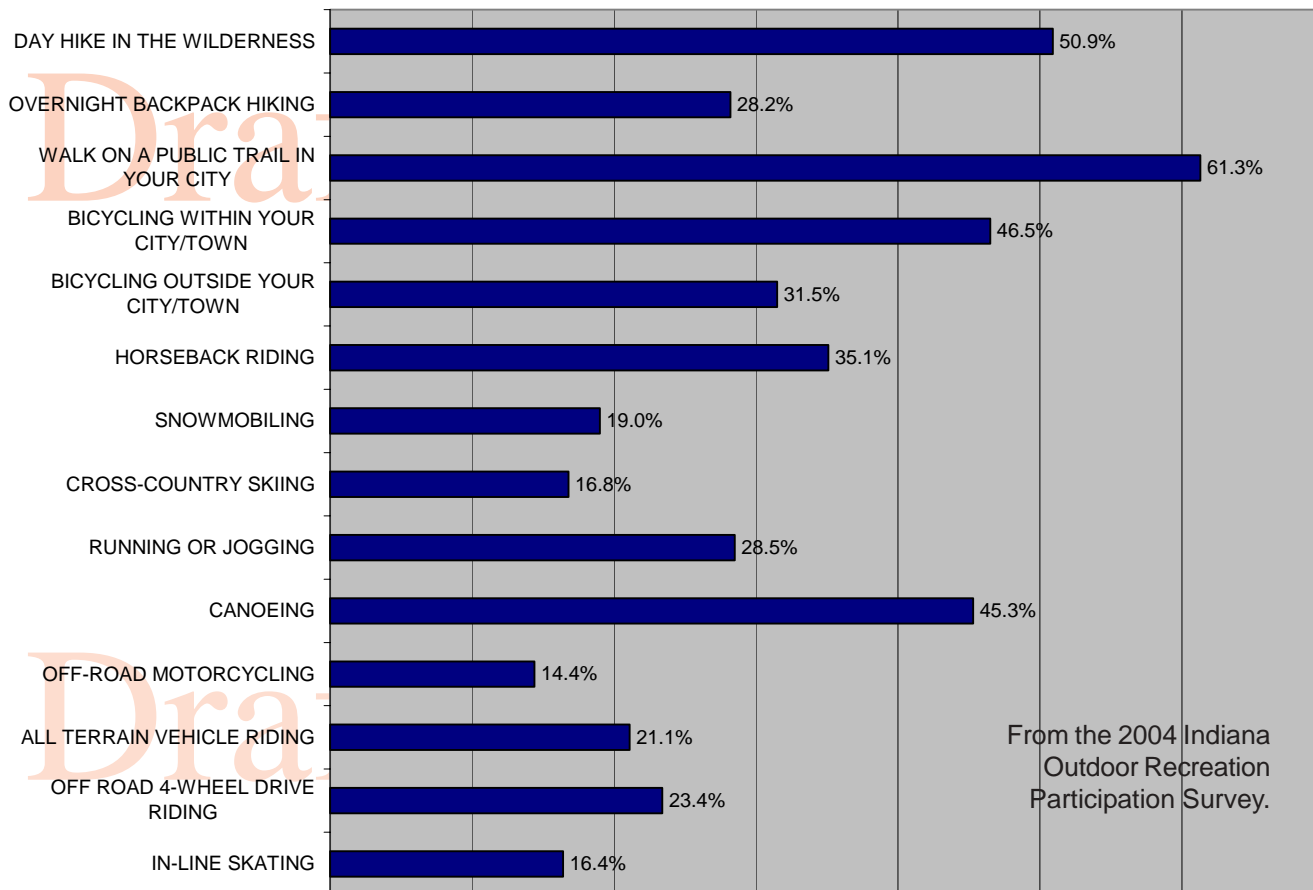
Reasons for not using trails



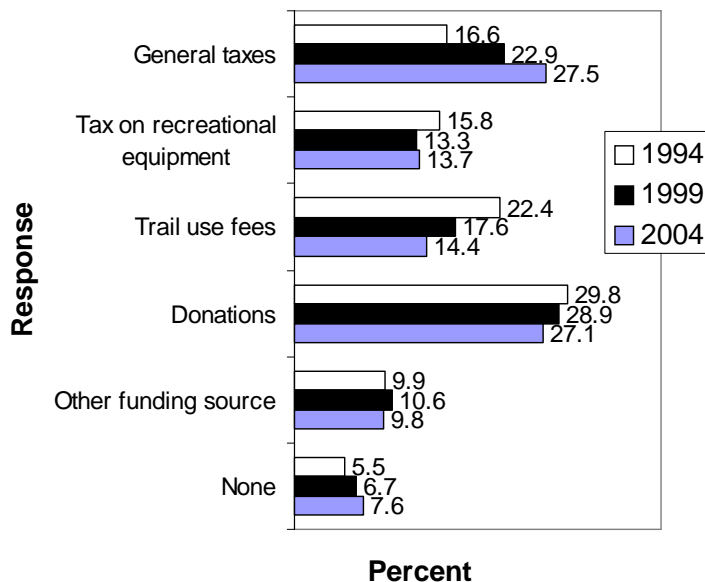
Percent

What are the primary reasons you don't use recreational trails more often? (Only asked of those who use trails once a week or less; multiple responses allowed)

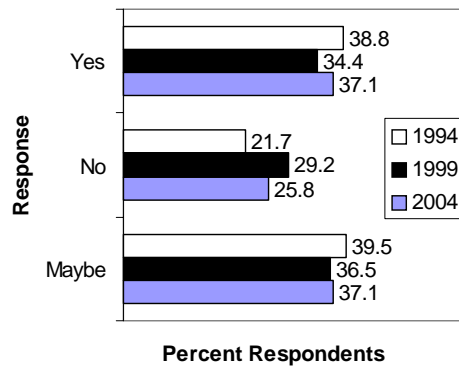
Please select your level of interest in participating in the following activities. Combined responses for “very interested” and “somewhat interested in participating in the following activities. (2004 responses only)



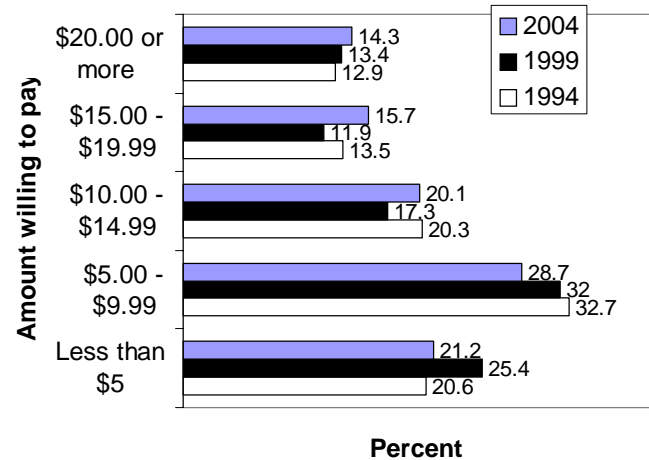
Of the following, which do you feel should be the primary source of funding for the development of recreational trails?



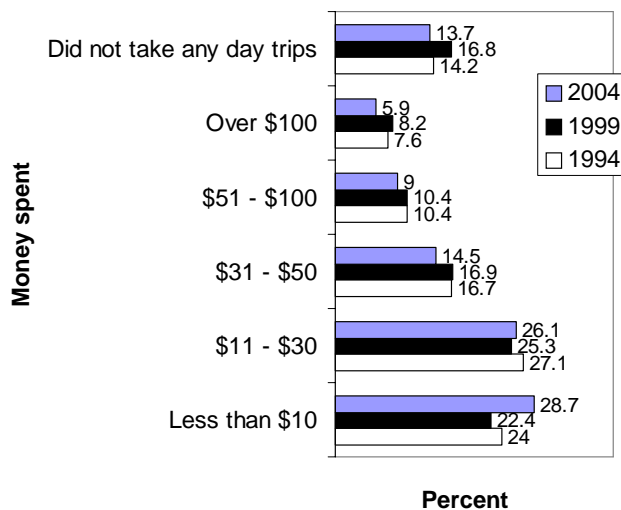
If the money was spent in your local area for trail upkeep and new trail development, would you be willing to pay an annual fee to use designated recreational trails?



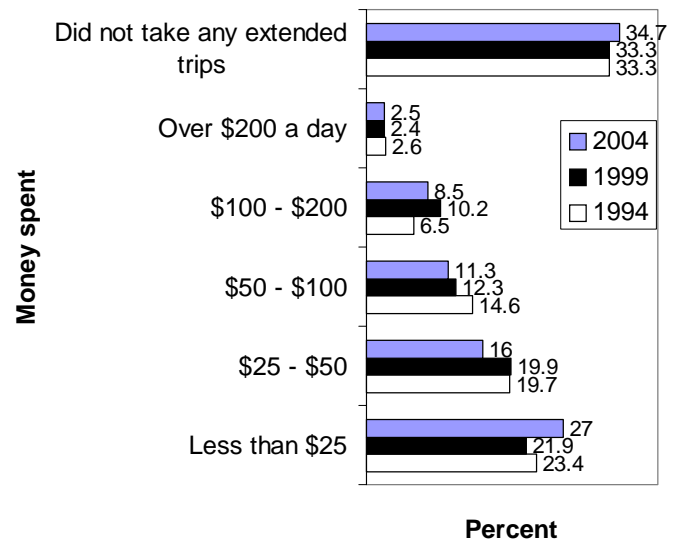
How much would you be willing to pay for this annual trail fee? [Only asked of those willing to pay an annual fee]



What is the best estimate of how much money you spent on your last ONE DAY recreational trip that involved the use of trails (include transportation, meals, etc.)?



On your last EXTENDED (2 or more days) recreational trip that involved the use of trails, approximately how much money would you say you spent PER DAY?



Chapter 6 Trail Related Issues in Indiana

There are many issues surrounding trails that both users and managers must face when it comes to using, developing and maintaining trails in Indiana. Depending on the point of view, the issues fall into 5 general categories: economics, development, safety, management and liability.

Trail providers, trail neighbors and trail users all are stakeholders in the success or failure of any trail project. Some issues are dealt with on the trail. Other issues must be addressed through larger broader based strategies implemented by trail managing entities and at various levels of government.

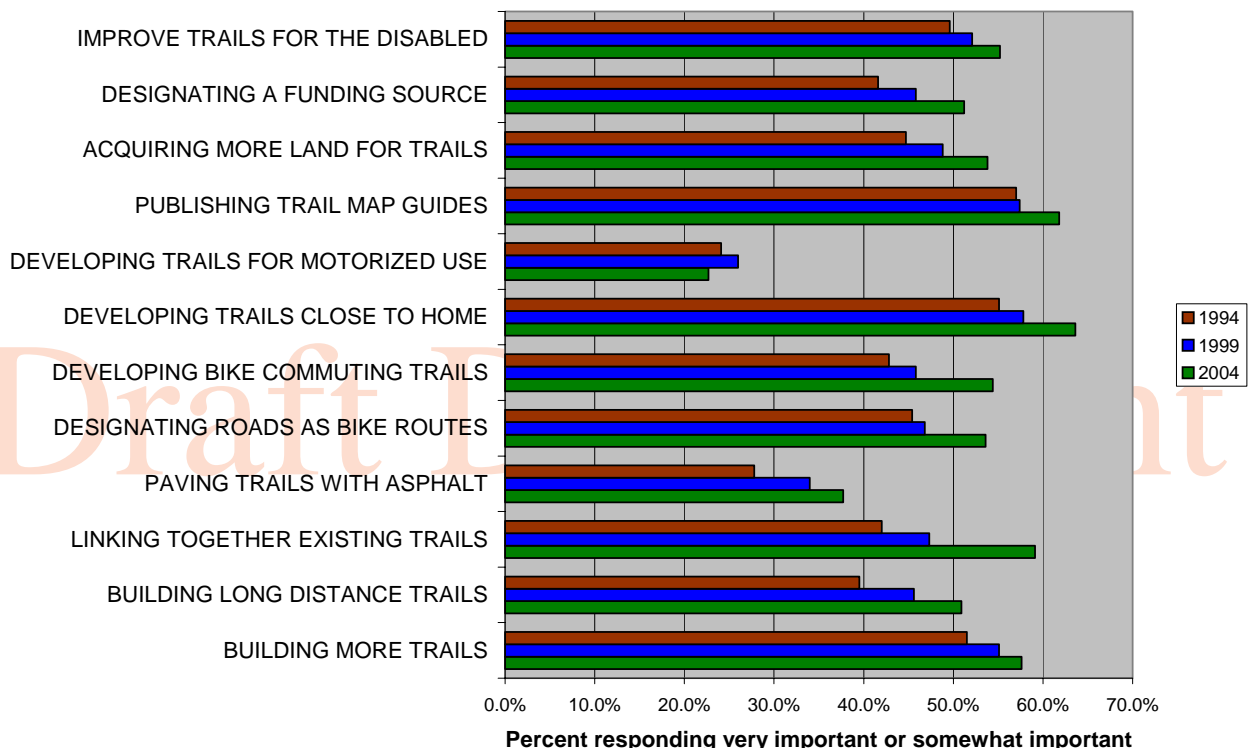
Trail providers are concerned about funding, developing and managing trails. Trail management entails resolving user conflicts, developing a maintenance plan and working with trail user groups to keep the trails in peak condition. Trail users are concerned with locating and accessing trails suitable to their chosen activity. Interactions with other trail users, trail conditions and

appropriate trail amenities are more examples of issues that concern trail users.

Trail neighbors are often the most vocal in calling for their issues to be addressed. Impact on local communities and land values, safety and trail management are often concern people who live next door to a trail. An open approach and careful attention to detail throughout a given trail project from start to finish will satisfy the concerns of those lucky few who have to opportunity to have a trail for a neighbor.

By working together, the combined forces of local, state and federal governments with private interest can provide solutions to the issues that affect trails in Indiana. This public-private partnership approach will ultimately provide a comprehensive trail network in Indiana.

How important do you feel the following trail issues are?



1994, 1999, 2004 Trail User Survey

Trails Management Issues Survey

The purpose of the Trail Management Issues Study was to identify current management trail issues that relate to the availability and use of trails; the availability of trail information; the planning and development of trails; trail design; funding for trail maintenance and development; the demographic description of trail use; and legislative concerns for trails through-out Indiana.

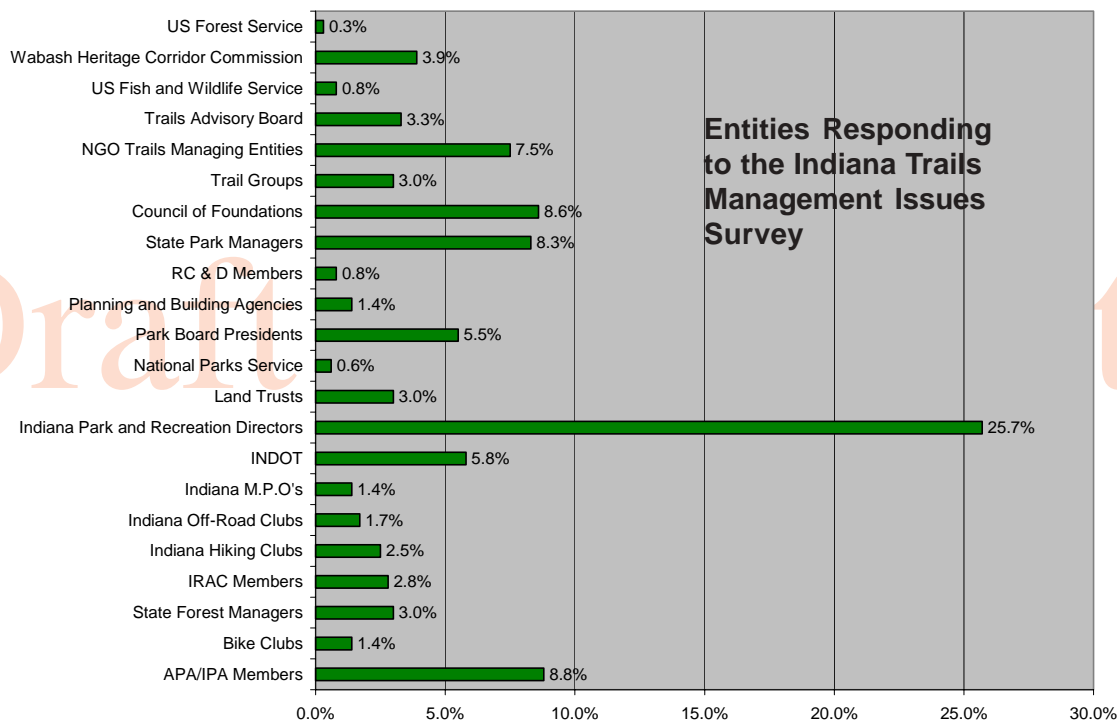
The survey instrument was the result of issues that emerged from the review of 150 randomly stratified current park and recreation master plans representing small, medium and large populations of cities, counties and townships. Survey instrument questions were developed following extensive study and analysis of these issues by the trails issue committee and staff of the Division of Outdoor Recreation, Streams and Trails Section.

The sample population (n=569) of the study was drawn from staff and management representing several agencies and organizations (e.g., State parks/ reservoirs property managers, State Forestry property managers, park and recreation superintendents/directors who are IPRA members, park board presidents, APA/IPA members, foundation councils, trail managing entities and

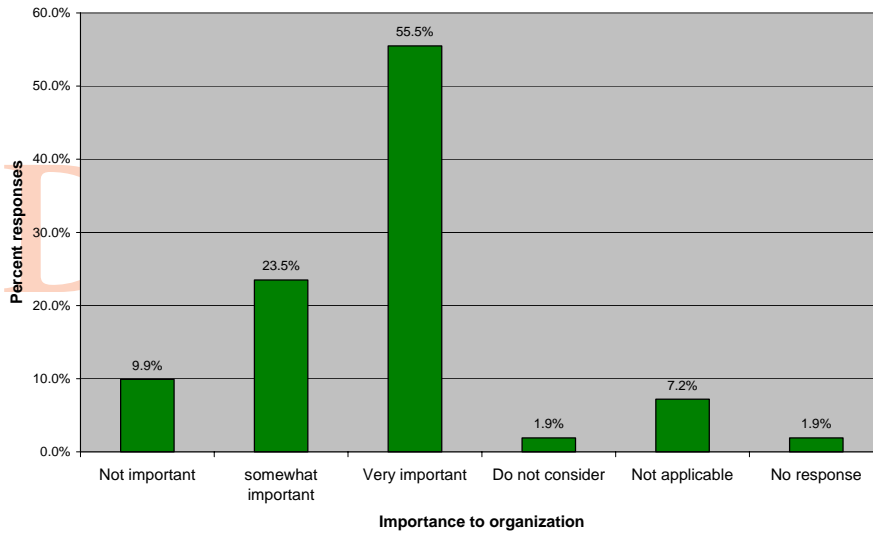
commissions) that had trail development/ management responsibilities. Each was sent a written survey instrument that was coded to track returned and unreturned instruments. Prior to distribution, the instrument was beta tested for question clarification and content at a Trail Advisory Board meeting during the summer of 2004. Following the beta testing edits, the instrument and a cover letter explaining the purpose of the study was direct mailed to the sample population by a private research company. Then after one week, a follow-up survey instrument was sent to those who had not returned the initial survey. At the end of the second week, another mailing was made to those who still had not returned their survey. Following the third week, a third and final survey instrument was mailed to all outstanding organizations that had not returned the survey.

Twenty-eight surveys were returned as undeliverable or not applicable, thus reducing the sample size to 541. Of the 541 survey instruments, 362 were returned (66.9%), analyzed and reported.

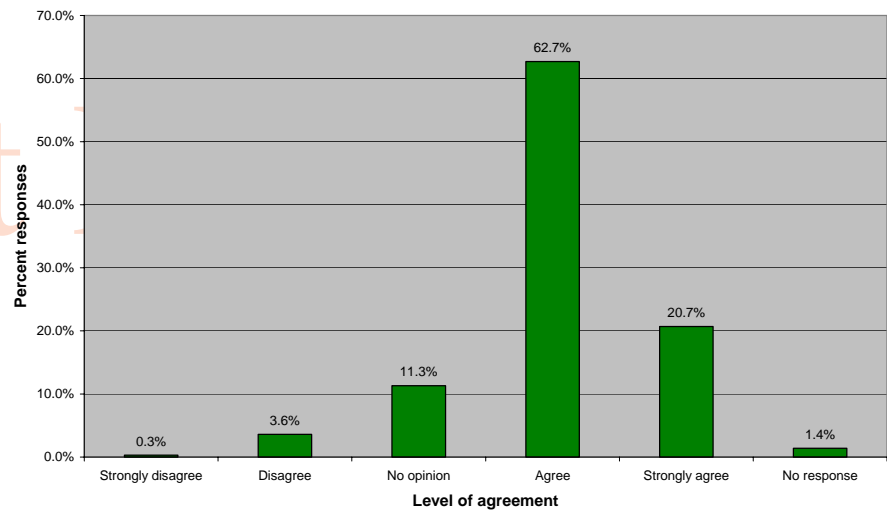
The study focused on some of the administrative/ management concerns of trail planning, design and demographics (i.e., number of users, etc.), along with trail information, trail funding, trail legislation and trail multiple use.



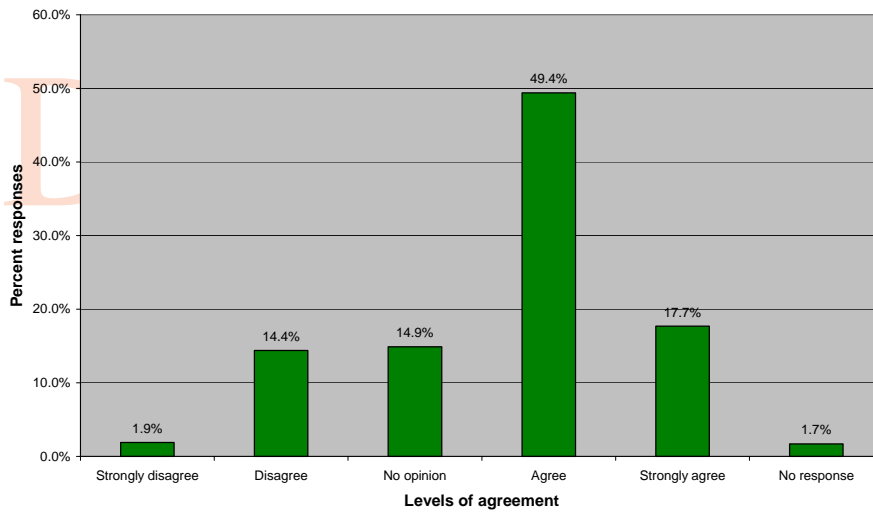
What is your organization's view towards land acquisition for trail development



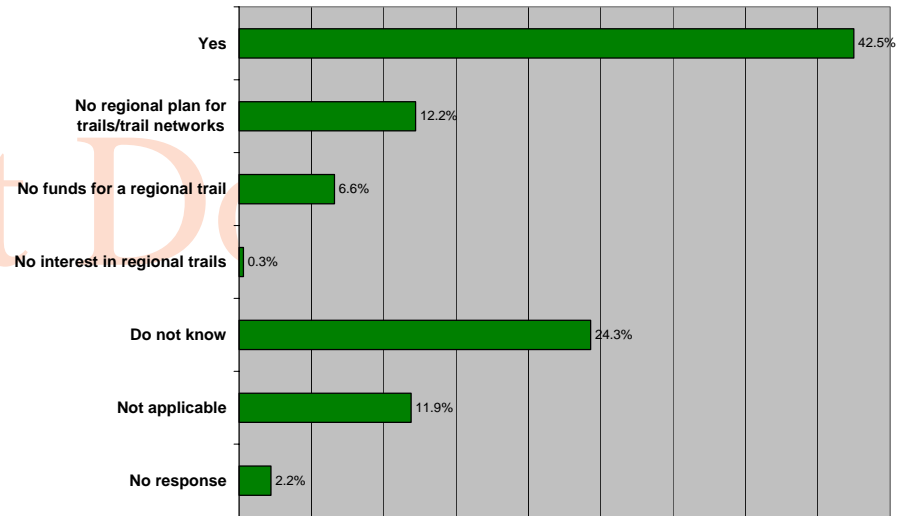
Standardized signs and symbols should be used throughout the state to designate trail activities.



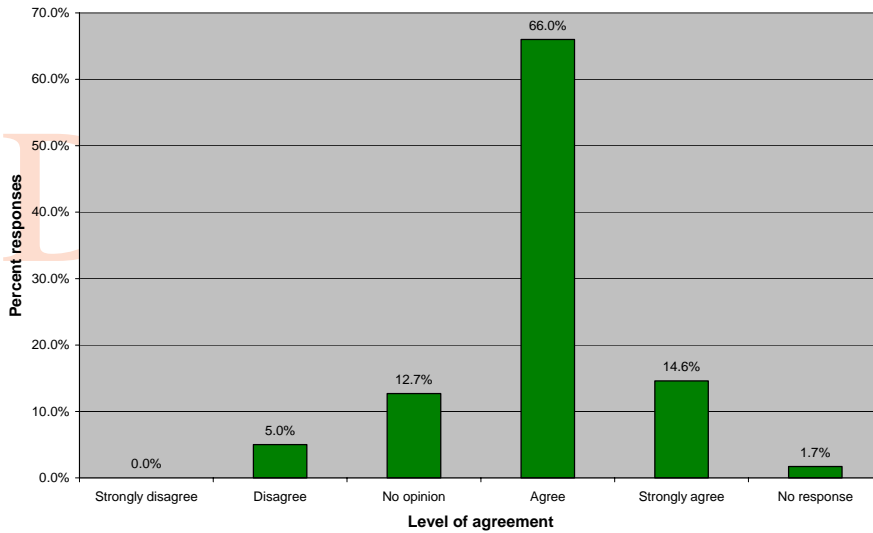
Trail developments and renovations must comply with the latest ADA accessibility standards.



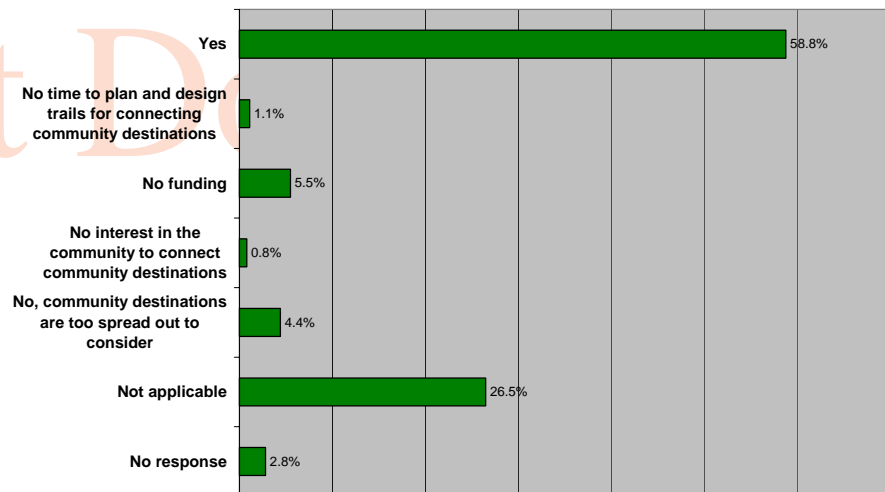
Is your community included in a regional trails plan that includes connections to other communities?



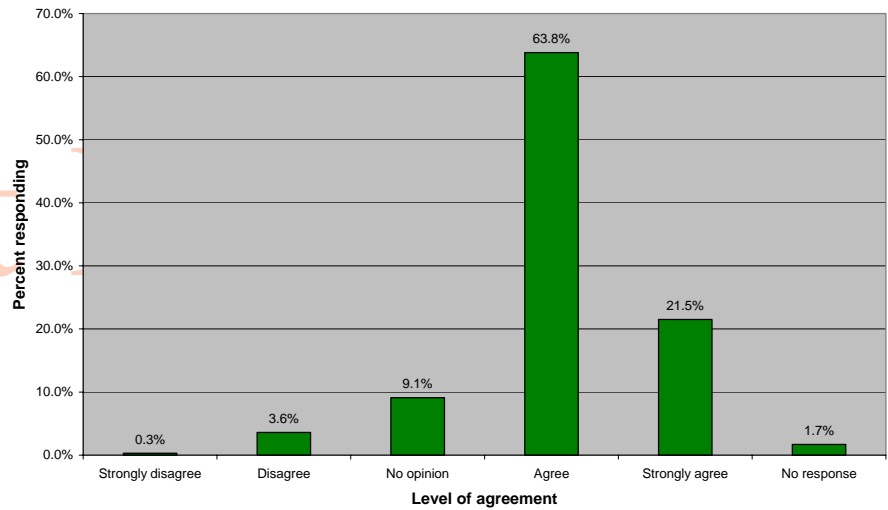
Interpretive signage along trails is important.



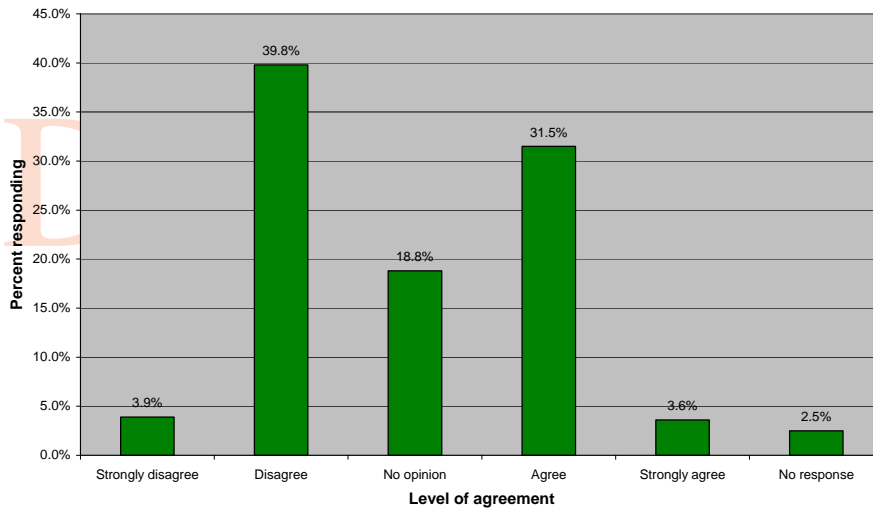
When planning and designing trails, do you try to connect community destinations such as schools, recreation facilities, commercial districts and cultural/historic sites?



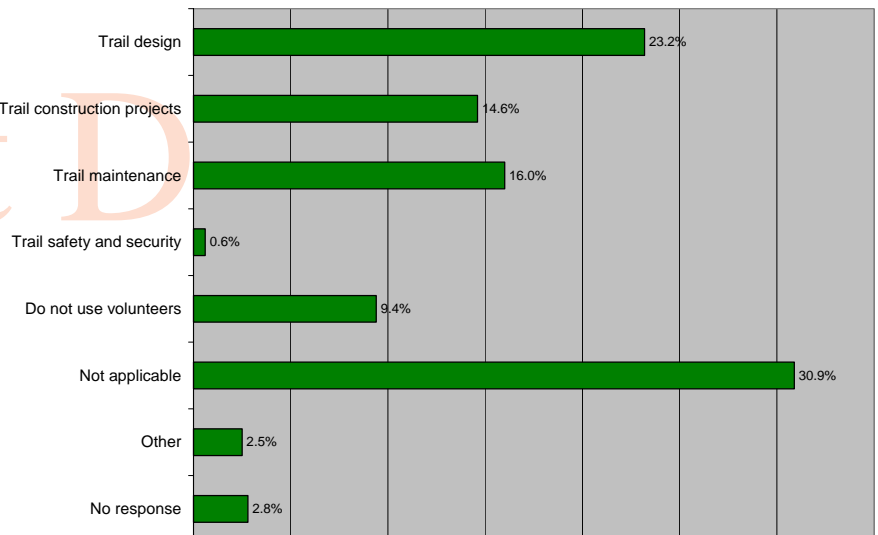
Adjoining landowners and businesses must be involved in planning for trail development



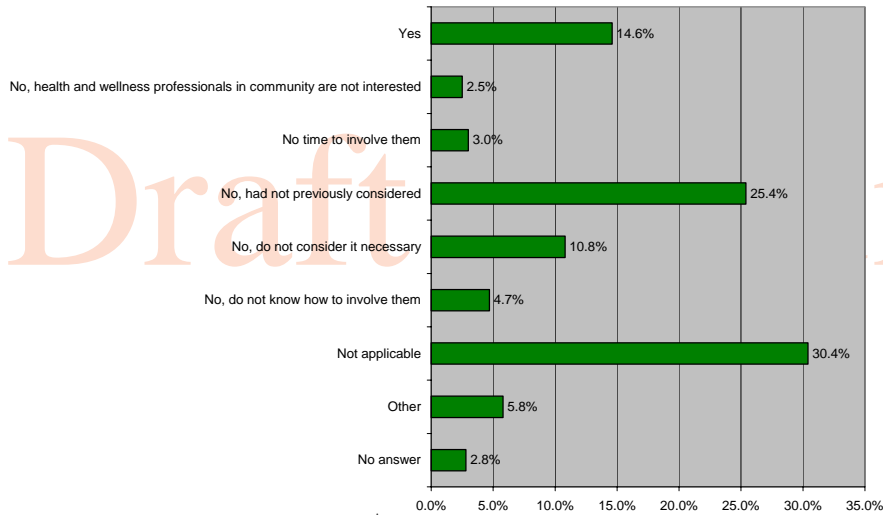
In terms of need for your service population, trail development is less important than other facility development



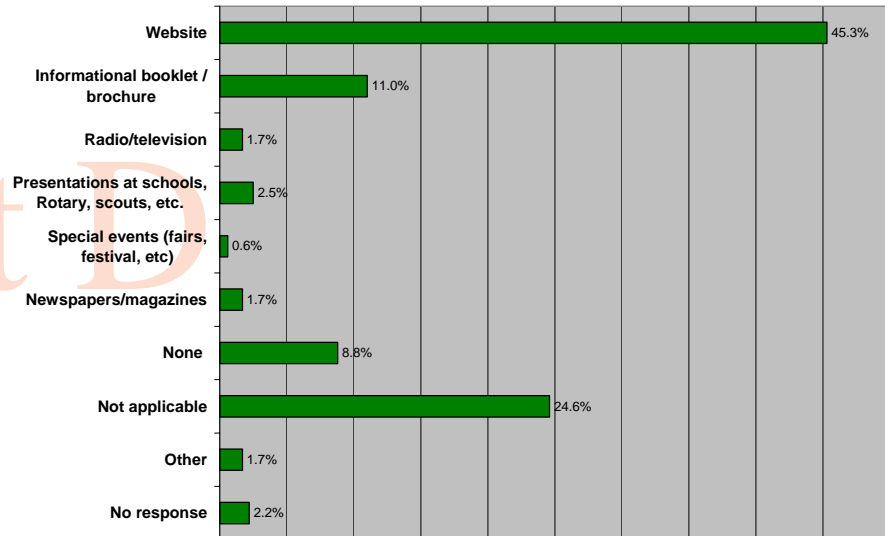
Do you use volunteers for any of the following activities?



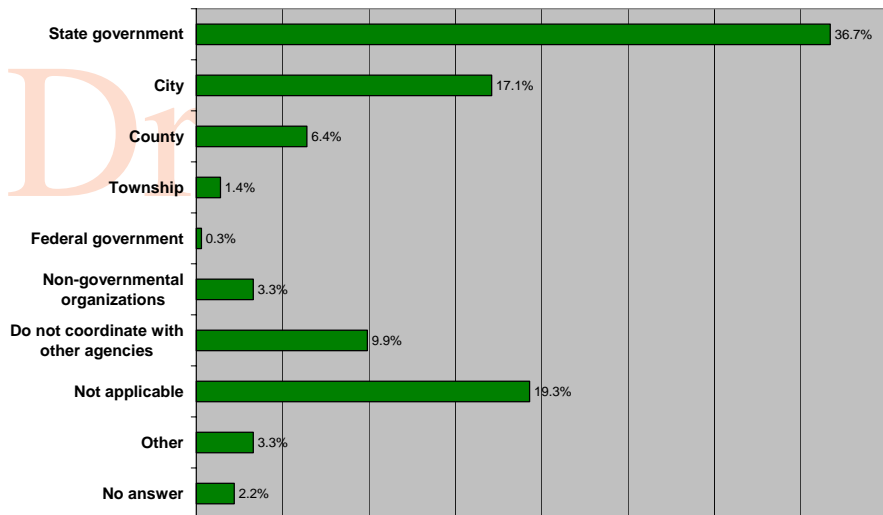
Are health and wellness professionals closely involved in the planning of your trails?



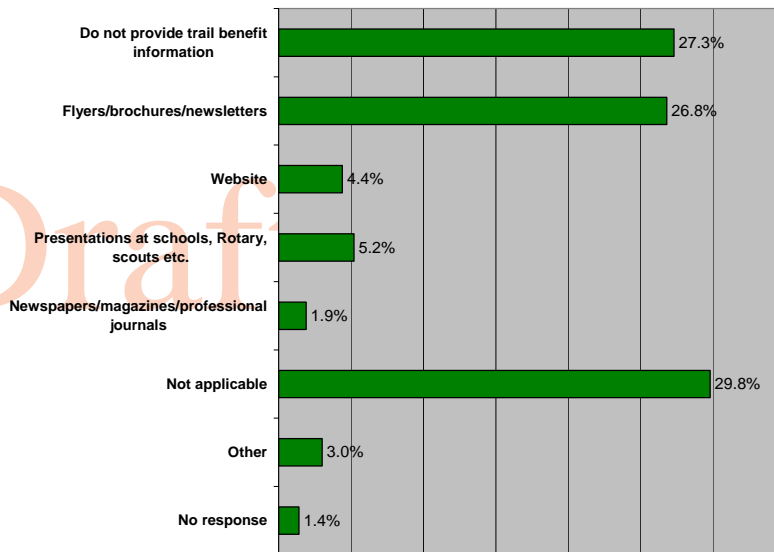
What media do you use to promote your trail system?



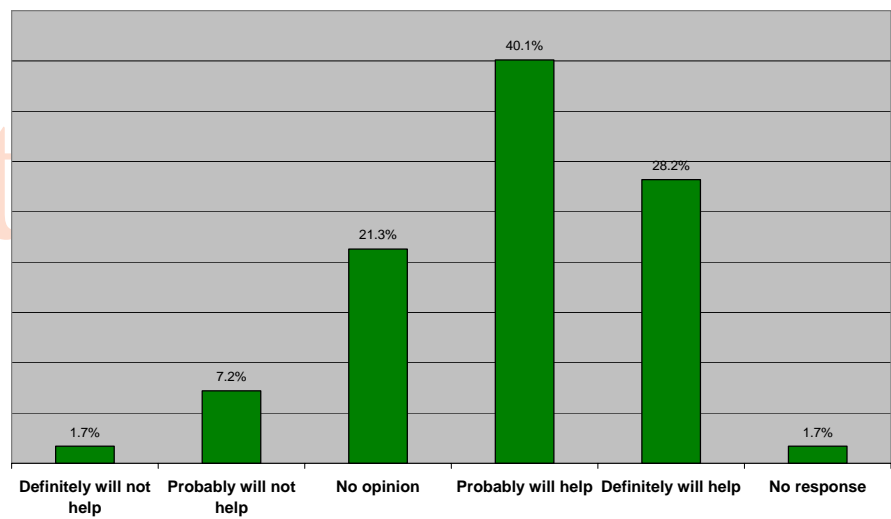
Does your organization coordinate with other agencies and organizations for trail system development and management?



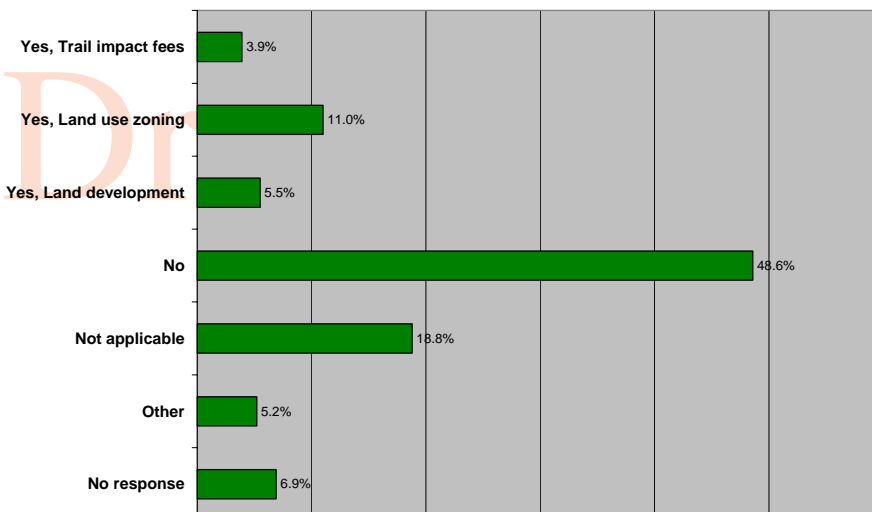
Do you provide information on the benefits of trail use?



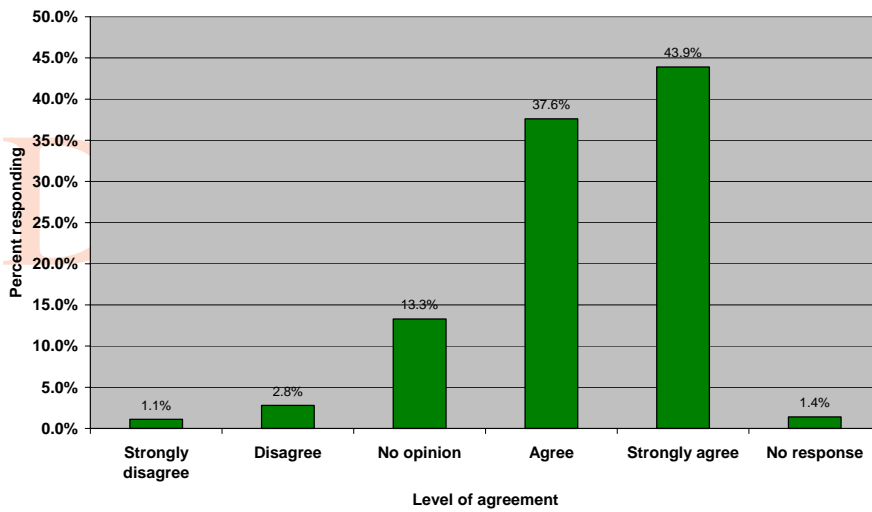
Do you feel legislative action will assist in the further development of multi-use trail networks?



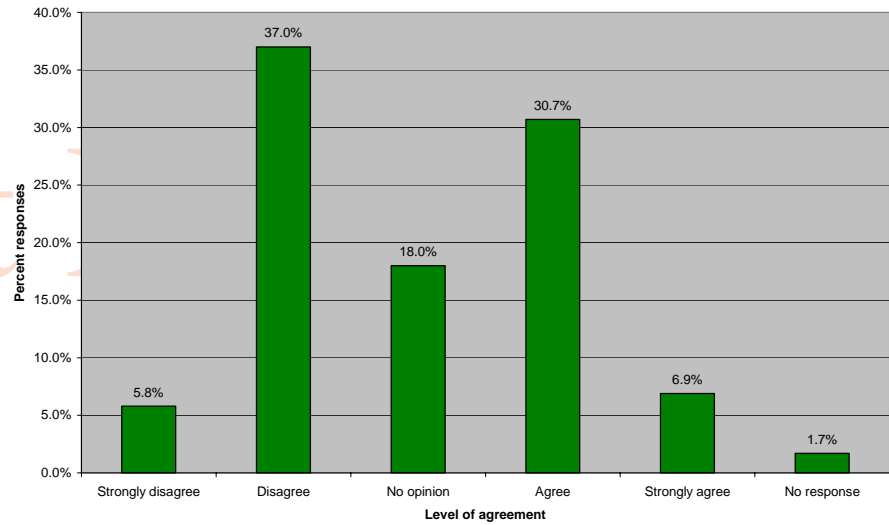
Does your community have ordinances and regulations that facilitate trail development?



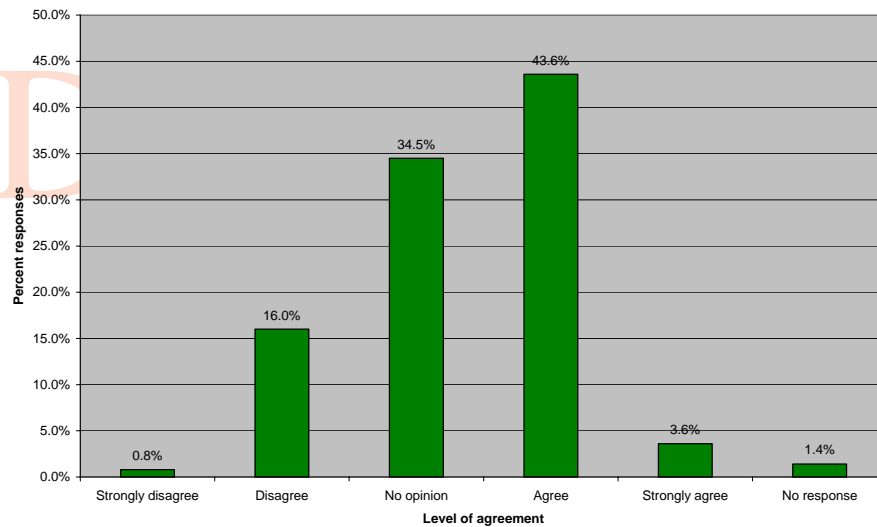
There should be state legislation that supports the acquisition of former railroad corridors for the development of trails.



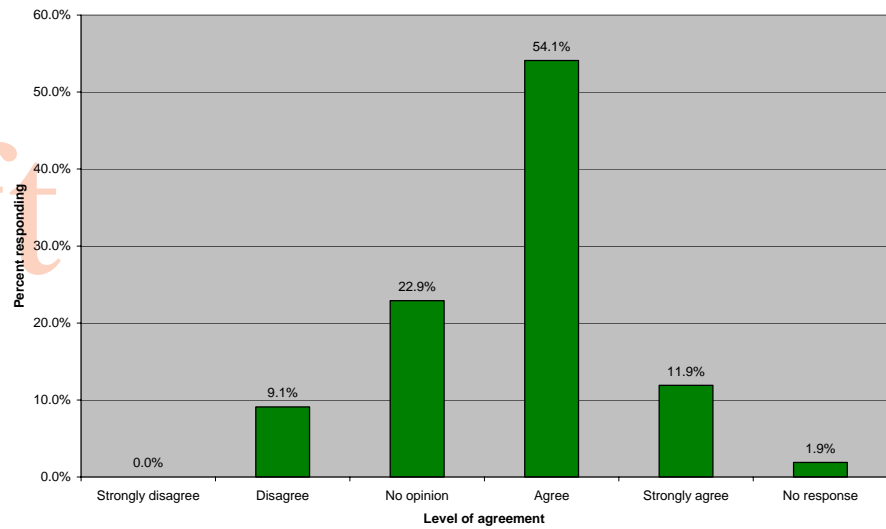
Developing trails that serve high-density populations should be a higher priority than developing trails that serve less dense populations.



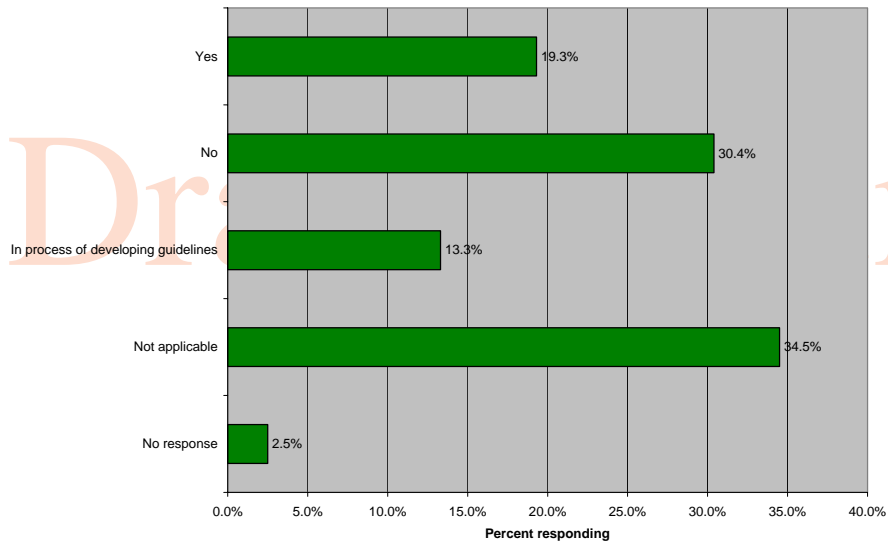
There is adequate information available describing how to determine optimal construction materials and essential trail features.



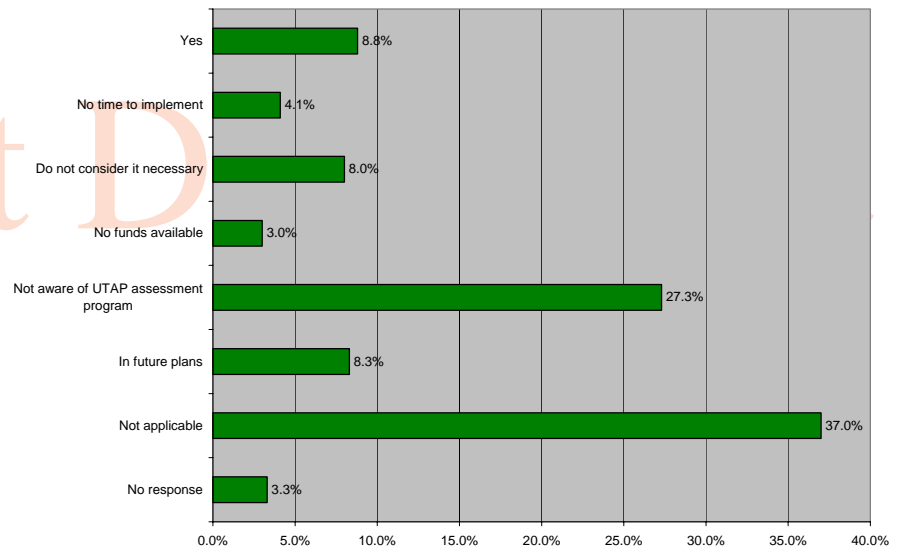
There is a need for research to identify common problems and possible solutions to trail development, planning and maintenance.



Does your organization use a specific set of guidelines for its day-to-day trail maintenance?



Are you using Universal Trail Assessment Program to evaluate trail difficulty and accessibility?



Trail Issues in Indiana

Based on trail user and manager survey research, discussions with trails providers and input from trail users, the following trail issues need to be addressed in order to provide a comprehensive network of trails that are accessible and available for Hoosier residents.

- Efforts in trail development, planning and design need to be better coordinated at local, state and federal levels.
- Trails opportunities are not considered when making decisions regarding road right-of-way projects, bridge development and expansion projects, and road abandonment.
- Members of the healthcare community are not players in providing trails.
- Landowners, not-for-profits, and businesses are not encouraged to participate in all phases from initiation of the trails' concept to its final completion.
- Trails are not considered in the planning development and design of public transit systems, nor are public transit systems considered when developing trails.
- Engineers, architects and planners are often not consulted in various phases of the trail development process to ensure natural resource preservation and ADA compliance.
- Trail funds to build and maintain trails do not adequately meet the demand for acquiring, developing and maintaining trails.
- There is a misconception that federal and local mechanisms only fund non-motorized trails in Indiana.
- There is no state funding mechanism to augment annual operating budgets and capital expenditure for acquiring and developing both motorized and non-motorized trails.
- Impact fees are not used consistently for trail funding.
- There are few incentives to use private sources of funding from entities such as foundations and corporations who have interests in trails and the health benefits derived from trail use.
- Current funding restrictions are prohibitive for not-for-profits to acquire and develop trails.
- Current funding mechanisms do not get trails (on the ground) built in a timely fashion.
- Land is becoming unavailable for trail use.
- State legislation does not support the acquisition of former railroad corridors for trail development in a timely manner.
- Trails are not generally considered or included in land use planning.
- The size and number of areas for the legal operation of ATV's, motorcycles, off-road bicycles, equestrian use and off-highway vehicles is inadequate.





- Current state properties for the legal operation of ATV's, motorcycles, off-road bicycles and off-highway vehicles are under-staffed.
- Information on the location and availability of trails is often difficult for the user to find and often does not provide information on trail conditions, level of difficulty or information regarding ADA accessibility.
- There is a distinct lack of research on trails and trail related issues in Indiana.
- Information on the benefits of trail use and the economic benefits of trails in Indiana is lacking and not available to the public.
- The use of educational materials about trail use and environmental ethics/etiquette needs to be developed and promoted.
- Interpretation of the natural, historical and cultural features of trails is not encouraged nor supported.
- Multilingual signage where appropriate to accommodate a more diverse citizenship is not provided.
- The use of standardized signs and symbols to designate trail activities, explain trail conditions and facilitate trail navigation is not generally used.
- There no mechanism in place to manage trails on a regional basis.
- A clear picture of the role of the state in acquiring, developing and managing trails in Indiana is lacking.

Draft Document

Draft Document

Draft Document

APPENDIX

Trails Summit Results

The following section outlines the findings of the Indiana Trails Summit held on May 31st. In general, attendees were grouped based on their geographical location within the specified regions. Within each group, participants identified and prioritized potential trail destinations and broad corridors that had potential for the development of trails by local and private entities.

The visionary trails system map presented in Chapter 1 was re-generated based on the

comments received at the summit and from comments received at the subsequent trails plan public meetings.

The map presented below represents a composite of the output from all of the regional sessions. The maps and lists presented on subsequent pages represent the results from each individual mapping session. The formats vary slightly from session to session. These results are a speculative vision of potential trail corridors that could be developed through the efforts of multiple entities.

State Visionary Trails, the American Discovery Trail and Local Corridor Opportunities

Indiana Trails Summit, May 31, 2006



Northwest Region

Top Ranked Corridors

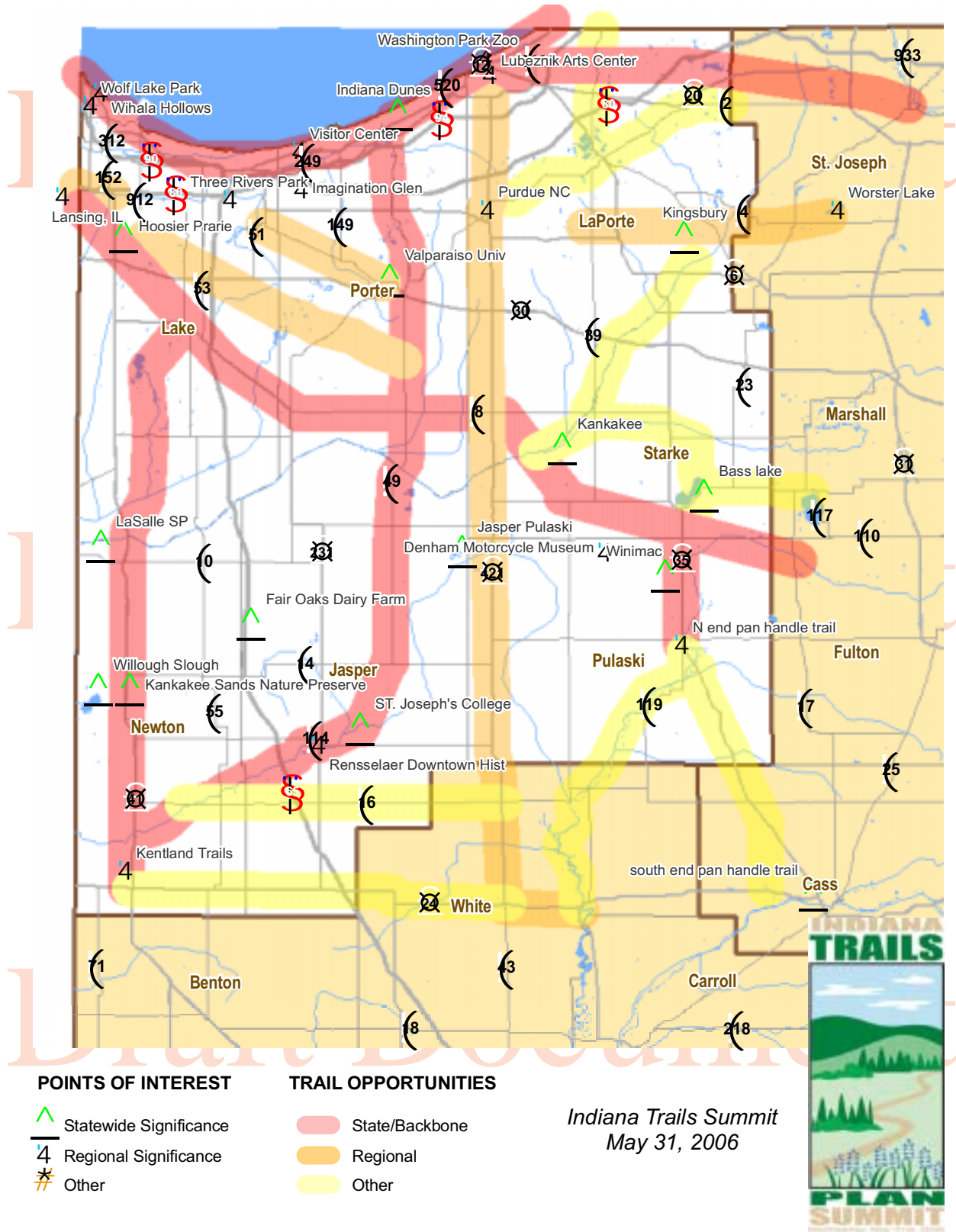
Marquette Greenway
American Discovery Trail Alternate Route
SR 49
Cedar/Newton Corridor
South Shore Corridor
Panhandle Connection / SDT
SR 421
C & O Corridor
Water Corridors

Destinations / Points of Interest (Significance)

South Bend (State)
Casinos (Regional)
Hammond / Gary / Michigan City /
Whiting
South Shore Rail (Regional)
Boutiques / Specialty shops in Downtowns of
many communities
City of Chicago (state)
Lake County Visitors Center, Hammond (State)
Star Plaza, Merrillville (Regional)
Lake Michigan (State)
Westfield shopping Town, Hobart (State)
Lighthouse Place outlet Mall, Michigan City
Marinas
Exit 256 Outlet Antique Mall
Fishers Oak Savannah (State)
Holly Oak Savannah, Wilmington, Jasper co.
(State)
LaPorte City Parks
Michigan City Parks
Valparaiso City Parks
Winamac Town Park, Swinging Bridge
(Regional)
Tippecanoe River (Regional)
Monterey (Town of) center of a number of trails
east of Bass Lake
Bruce Lake
Denham Motorcycle museum
Crown Point historic court house
Lubeznik Art center, Michigan City (Regional)
Washington Park Zoo, Michigan City, (Regional)
Kankakee Sands nature Preserve, Newton Co.
(State)
Earl Park (Yearly festival)
Benton county Trail using Railroad
Pan-handle pathway (Pulaski, Cass county)
(State)

Monon Railroad in Monon
County Courthouses
Renesslaer downtown, historical area, county
seat, developing a trail head on river (regional)
Fair Oaks, Dairy Farm (State)
St. Joe College in Renesslaer (State)
Imagination Glenn Park, bike trails, Portage
(Regional)
Portage lakefront park (Regional)
Veteran's memorial – Munster (Regional)
Lansing, Illinois (State) state connection
Crown Point – Historically significant courthouse
(State)
Hoosier Valley Railroad Museum, North Judson
(Regional)
Lomax Station, Lomax Starke Co. (Regional)
Lake Co Fairgrounds (Regional)
Red Mill County Park, Otis, LaPorte County
(Regional)
Bluhm County Park, Westville (Regional)
Creek Ridge County Park, Michigan City
(Regional)
Luhr County Park, LaPorte, (Regional)
Marquette Beach county Park, Gary (Regional)
Washington Park, Michigan City (Regional)
Crown Point, county Seat (Regional)
Kentland county Seat (Regional)
Bass Lake, Starke County (Regional)
Rohrman Park, Schererville
Sherwood Park Schererville
Reder Park, Schererville
Lemon Lake, Cedar Lake (Regional)
Cedar Lake at Cedar Lake (Regional)
Stoney Run Park, Winfield Township near Leroy
(Regional)
Grand Kankakee Marsh Park, near Shelby
(Regional)
Three Rivers Park, Gary (Regional)
Deep River Park, Hobart (Regional)
Buckley Homestead, Lowell (Regional)
Sunset Hill, Valparaiso, (Regional)
Dunn's Bridge Park, Porter County (Regional)
Indiana Dunes State park and National Lake
shore
Valpo University and county Seat
County parks
Town of Porter new Visitor's Center (State)
Purdue University, northwest (Regional)

Indiana Trails Summit Northwest Region Planning Session



North Central Region

Corridors (Priority)

US 31 / Nickel Plate

Winona

Cardinal Greenway

South Shore

Wabash River

Pottawatomie Pathway

Old Lincoln Highway

Indiana Toll Road

Points of Interest/Destinations (Significance)

Pumpkin vine Nature Trail (Regional)

Goshen Park System (Regional)

Plymouth (City of) (Regional)

Elkhart County and St Joseph County along St.

Joe River (State)

Potato Creek State Park (State)

University of Notre Dame (State)

Bonneville Mille County Park (Regional)

Krider World's Fair Garden (Regional)

Granger and St. Patrick's County Park

(Regional)

South Bend Regional Airport / shoreline (State)

Michigan Beach Line (State)

Seven Pillars (Indiana trading post, limestone formations) (Regional)

Mississinewa Reservoir / Dam (State)

Sweetzer Switch Trail (State)

Cardinal Greenway (State)

Town of Converse (Regional)

Maconquah High School (Regional)

Grissom Air Museum (State)

Elkhart River Walk and Commons (Regional)

River Bluff Trail (Regional)

Little Turtle Waterway (Regional)

Town of Monterey (Regional)

Walkerton, North Liberty, Lakeville (Regional)

City of Rochester (Lake Manitou) (Regional)

City of Kokomo (State)

Winona Lake (Regional)

Mentone Egg (Regional)

Packerton Mall (Regional)

River Preserve County Park (Regional)

Town of Syracuse (Regional)

Nappanee – Amish Acres (Regional)

American country Side (Regional)

Judy Burton nature Preserve (Regional)

Fulton County Historical Society (Regional)

Pike Creek Falls (Regional)

Ivy Tech in Logansport (Regional)

France Park (Regional)

Riverside Park, Cass County Carrousel (Regional)

Patriot Park (Regional)

Cedar Island (Regional)

Culver (Culver Academy) (State)

Peru (Circus Hall of Fame) (State)

Manchester (Manchester College) (State)

Salamonie Reservoir (State)

Oxbow Park (Regional)

Shipshewana (Amish Country) (State)

Bendix Woods County Park (Regional)

Edwardsburgh (State)

Downtown South Bend (State)

Spicer Lake Nature Preserve (Regional)

Town of New Carlyle (Regional)

Town of Bristol (Regional)

Elkhart County Historical Museum (Regional)

Goshen College (Regional)

Old Bag Factory (Regional)

East Bank Trail (State)

Potawatomi Park / Zoo (State)

Rum Village Nature Preserve (Regional)

Cole Porter Home (State)

Oakhill Winery (Regional)

Elkhart Environmental Center (Regional)

Woodlawn Nature Center (Regional)

Cass County Historical Museum (Regional)

East Race Waterway (State)

Pinhook Park (Regional)

Headwaters of Kankakee River (Regional)

Tippecanoe Nature Preserve (Regional)

Ancila College (Regional)

Miami County Museum (Regional)

Circus City Festival (Regional)

Winona Mountain Bike Trail (State)

Chinworth Bridge (Regional)

Town of Laketon (Regional)

Roann Covered Bridge (Regional)

Stockdale Mill (Regional)

Mallard Roost Public Access Site (State)

Benton Landing (Regional)

Potawatomi Park (Regional)

Old Town Pump (Regional)

Bankers Row (Regional)

Canal Crossing (Regional)

Logansport Hospital (Regional)

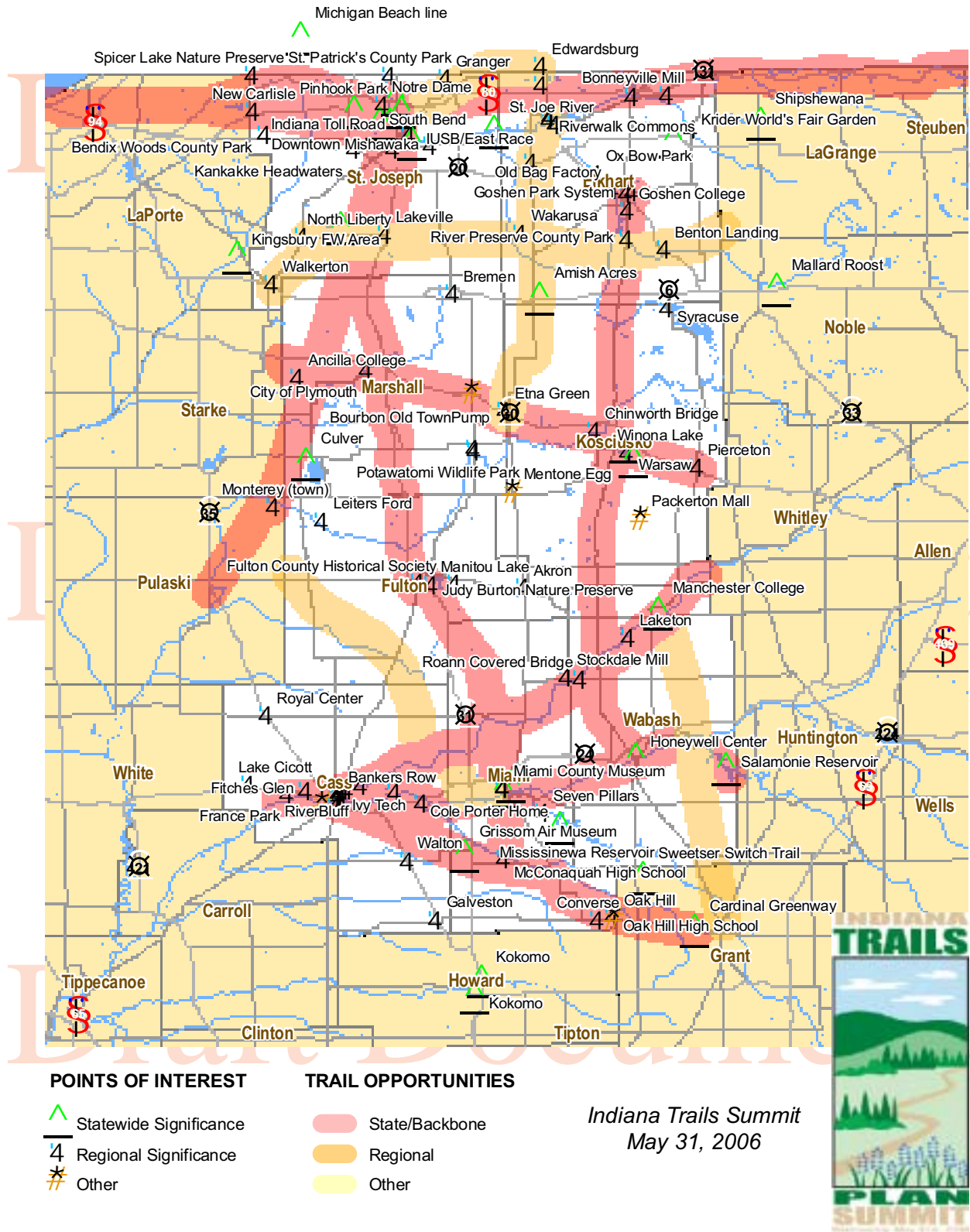
Spencer Park (Regional)

Fitches Glen (Regional)

Lake Cicott (Regional)

Wabash Honeywell Center (State)

Indiana Trails Summit NorthCentral Region Planning Session



Town of Middlebury (Regional)
 Town of Bremen (Regional)
 Das Essenhaus Complex (State)
 Leiters Ford (Regional)
 Indiana Toll Road (State)
 Wakarusa (Regional)
 DT Akron (Regional)
 Etna Green (Regional)
 Royal Center (Regional)
 Walton (Regional)
 Galveston (Regional)
 Town of Warsaw (State)
 Pierceton (Regional)
 Boot Lake Nature Preserve (Regional)
 Kingsbury Fish and Wildlife Area (State)

North East Region

Identified Corridors (Significance)

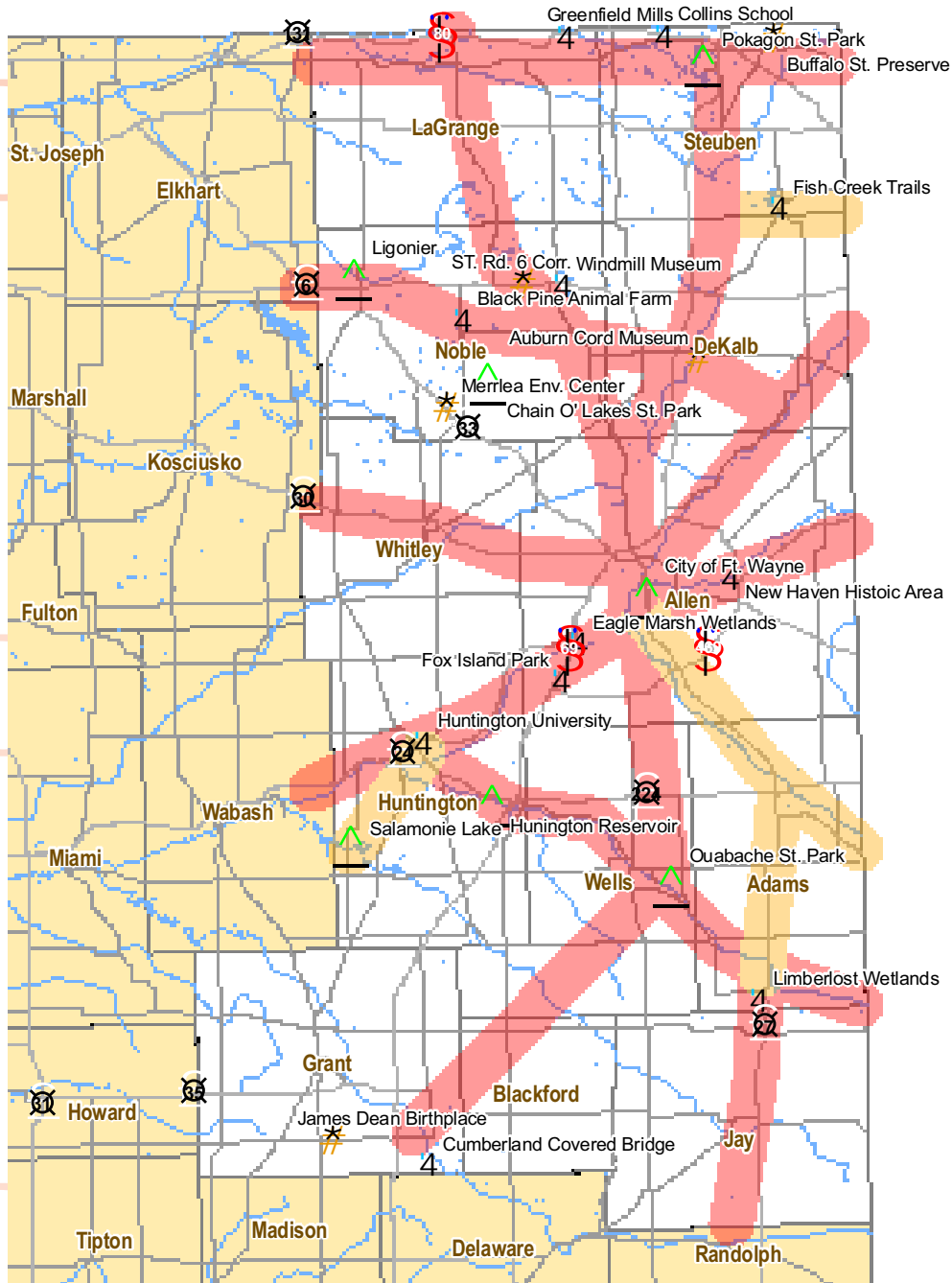
Lincoln Highway Trail (State)
 Cannonball Trail (Regional)
 Huntington / Salamonie (Regional)
 Extension of Upstate Trail (State)
 St. Joe River Extension (State)
 Wabash River Corridor (State)
 St. Mary's River Corridor (Regional)
 State Road 120 Indiana Trail (State)
 Old Route 27
 WaWasee Trail (Warsaw) (State)
 Wabash River (Maumee River) from Wabash to Fort Wayne to Ohio (State)
 Fort Wayne to Sturgis Michigan (State)
 Visionary Trail to Quabach (Upstate Indiana Trail) (State)
 Fort Wayne to Indy (State)

Points of Interest (Significance)

Heritage Square Downtown, Fort Wayne (State)
 Chief Richardsville House (State)
 Cline Museum
 Tri-State University (State)
 Fish Creek Trails (Regional)
 Wild Wind Buffalo Preserve
 Limberlost State Historic Site (State)
 Loblolly Wetland Preserve (Regional)
 Eagle Marsh (Regional)
 Crane Marsh
 Windmill Museum (Regional)
 Natural Lakes (State)

Noble Amish Country (State)
 Cannonball Connector (Regional)
 St. Mary's River Corridor (State)
 St. Joe River Greenway (State)
 Spencerville Covered Bridge (Regional)
 James Dan House, Gravesite and Museum (State)
 Missisenawa Battlefield (Regional)
 Lincoln Museum (State)
 Pokagon State Park (State)
 Fox Island (Regional)
 New Haven – Historic Transportation related sites (Regional)
 Allen Co. War Memorial Coliseum (Regional)
 Wizards Stadium (Regional)
 Huntington University (State)
 U.S.6 Grand Army of the Republic
 Monesser Trail Park (Regional)
 Black Pine Animal Park (Regional)
 Merrylea Environmental Center (Regional)
 Greenfield Mills (Regional)
 Collins School (Regional)
 Underground Railroad Ho (State) uses
 Whipil Bridge
 IPFW/IVY Tech Center, Fort Wayne (State)
 Johnny Appleseed Trail / Grave (State)
 Cumberland Covered Bridge
 Metea County Park (Regional)
 Wabash Erie Canal (State)
 Three Rivers (State)
 Maumee River Valley Corridor (State)
 St. Joseph River Corridor (State)
 Historic Downtown Kendallville (Regional)
 Little Wabash and Wabash River Corridors (State)
 Huntington Lake (State)
 Salamonie Lake (State)
 Abandoned Erie Railroad (Regional)
 Pigeon River State Wildlife Preserve (State)
 Elkhart River (Regional)
 City of Ligonier (Regional)
 History City / Fort to Port (Interstate Connection) (State)
 Sylvan Lake
 Gene Stratton Porter (State)
 Chain 'O Lakes State Park (State)
 Kruse Auto Park / War Museum (State)
 Ouabache State Park (State)
 Acres Preserve (Regional)
 Cedar Creek Canyon Corridor (Regional)
 Shishewana (State)

Indiana Trails Summit NorthEast Region Planning Session



POINTS OF INTEREST

- ▲ Statewide Significance
- 4 Regional Significance
- ★ Other

TRAIL OPPORTUNITIES

- State/Backbone
- Regional
- Other

*Indiana Trails Summit
May 31, 2006*



White Pines Trail (State)
 Additional Connector to Fort Wayne Children's
 Zoo (Franke Park) (State)
 Grabill (Amish Country) (Regional)
 St. Joe (East of Corridor)
 Fort Wayne Portage Points and entry to the
 Midwest (State)
 Historical Old Fort (State)
 Headwaters Park (State)
 Grand Wayne Center Botanical Conservatory
 (State)

East Central

Corridors

National Road/US 40
 Cardinal Greenway/American Discovery Trail
 Monon with extensions to Nickel Plate RR and
 B.&O. on Indy westside
 Connector through Johnson and Shelby
 Counties through abandoned RR corridors or
 US 421 that link southern Indiana routes with
 central Indiana.
 White River
 Wildcat (bisects Howard Co.)
 Whitewater River through Richmond

Destinations

Morse Reservoir
 Geist
 Eagle Creek
 Prairie Creek
 Summit Lake
 Restored Wetlands in Marion and Hancock
 Counties
 Fall Creek
 White River
 Whitewater East Fork into Ohio (Riverside Trail)
 Bib Blue
 **Wildcat Creek in Howard County
 Falls and Gorge in Richmond
 Whitewater Gorge
 Falls along Fall Creek
 Nature Preserves—Redtail Nature Preserve
 Westwood Lake Park—Summit Lake
 Earlham College in Richmond connects to
 National Trail and Gorge

IUPUI and Marion College—connects to White
 River and many recreation facilities in
 Indianapolis
 Taylor University
 Anderson University—near Mounds SP and river
 Indiana Wesleyan
 Ball State (use School of Architecture for some
 help)
 Franklin College and University of Indianapolis—
 potential connections to Attebury and southern
 trails.

Note: Several colleges and universities are near
 Cardinal Greenway and can be used as feeder
 routes.

Districts in Marion, Hamilton, and Madison
 Counties

Minitrista Center in Muncie

Historic Homes Tours

Lafayette Trace in Hamilton Co.

Historic Richmond

Connor Prairie links to White River

Underground railroad. Link to DHPA African-
 American Heritage Plan

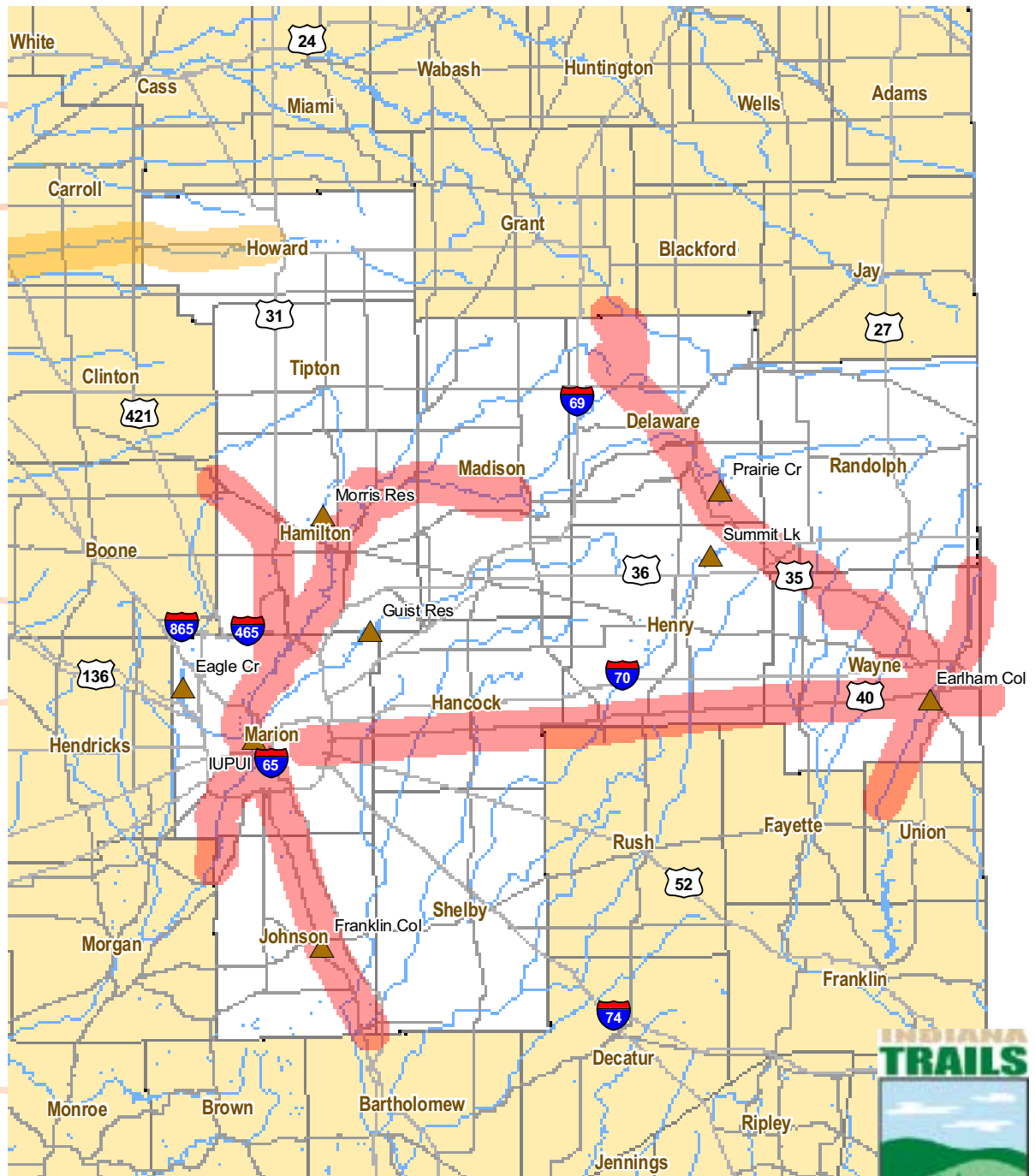
- Both US 27 and US 31 have
 underground RR routes.

B.&O. Trail links Indianapolis Raceway Park in
 Clermont and the Indianapolis Speedway.

Wilbur Wright F&W in Henry County connects to
 Cardinal Greenway

Many communities and counties in Central East
 have historic districts and national register
 designated areas.

Indiana Trails Summit Central East Region Planning Session



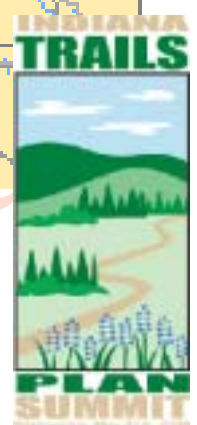
POINTS OF INTEREST

- ★ Statewide Significance
- Regional Significance
- ▲ Other

TRAIL OPPORTUNITIES

- State/Backbone
- Regional
- Other

*Indiana Trails Summit
May 31, 2006*



West Central Region

Points of Interests

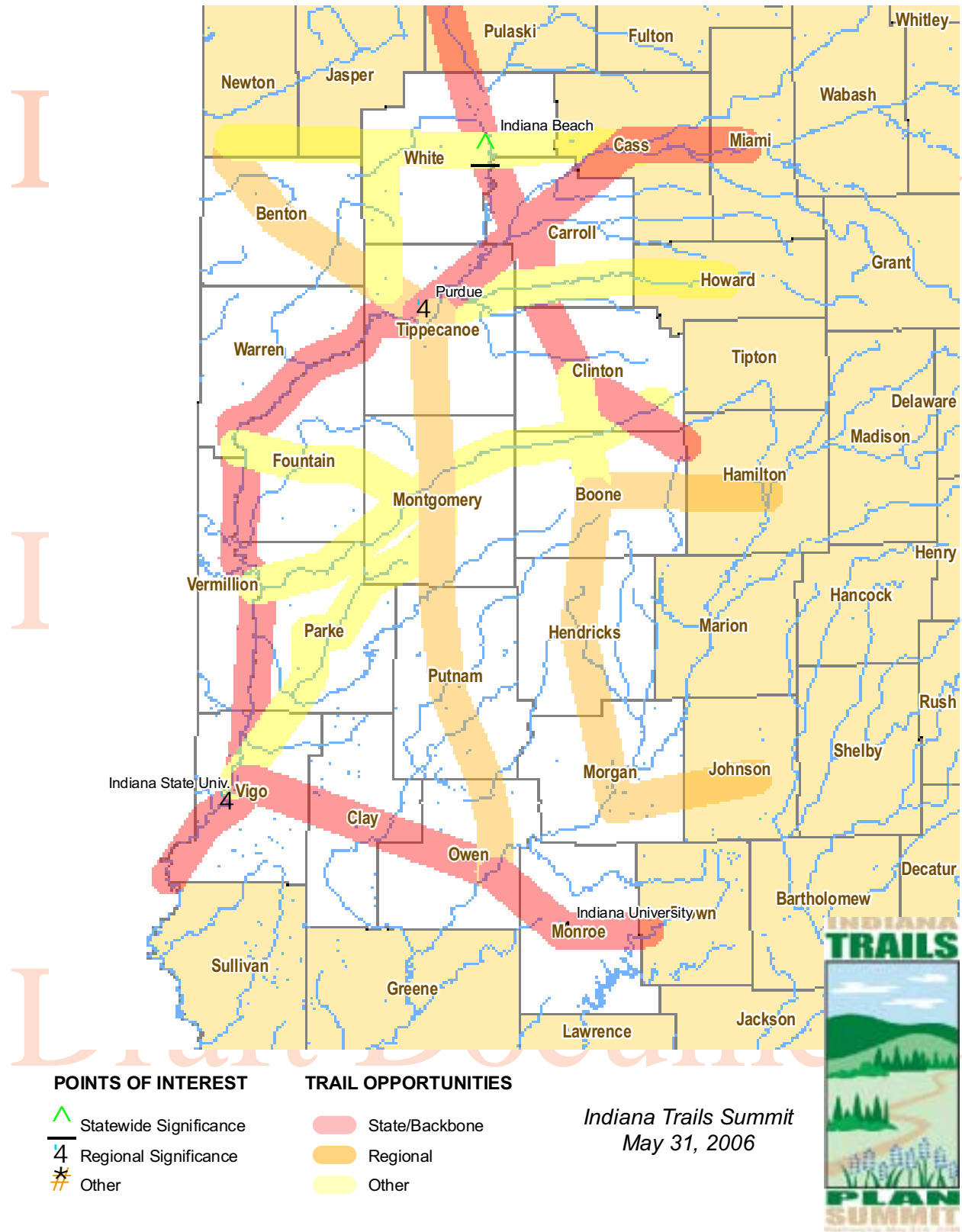
State Parks (Protected Natural Areas)
Existing Corridors /trails systems
Historic Sites
Waterways
Universities
Courthouses
Rail corridors
Agriculture heritage
Wineries/breweries/chocolate Factories
Connectivity
Wabash Erie Canals
North – South Corridor
 (US 231 Corridors)
 (Waterway features)
ISU / RH IU
Look for previous State Roads reverted to local
use / control
Benton/White/Carroll County void
Link courthouses to courthouses as destinations
Covered Bridges
Watch for environmental impacts at rivers next
to railroads
Feasibility route
Fitness possibilities
Economic Development
Quality of experience

Trail connections

Farm Heritage Trail with Frankfort
Frankfort up to Delphi with Monon Corridor
Continue to Monon Line from Marion County to
Frankfort and beyond Logansport – Monticello
Lebanon with Westfield along abandoned
Railroad corridor
Indiana Beach at Monticello
Warren Co. – Big Pine Creek
Owen-Putnam / Greene / Sullivan State Forest
Knobstone Trail up to Martinsville
Big Walnut Creek
Depauw University
Connecting State Parks
Bartholomew and Brown Counties to
Bloomington
Add the Wabash River
Crawfordsville west – abandoned Peoria – E.III.
Line
Wabash Erie Canal
All the Courthouses

B& O with Raccoon, Shades, Turkey Run and
Illinois
IU, ISU University Campuses
North T.H. Gateway Covered Bridge
North T. H. to Brazil, North to Clay County
Frankfort Roundhouse
Rail road Round houses generally
Watch for opportunities (challenges) to
connecting with I-69 corridor
Small town granaries
Agricultural history in general
Agricultural education
Rural Historic Districts
Delphi- Monon Highbridge Trail
Attica Wabash – Erie Canal with Nature
Preserves / Pecan Basin
Land Trust Holdings
People Pathways in Green castle
Covered Bridge Festival routes in Parke County
Vigo (Terre Haute) System
Historical Cemeteries
Ernie Pyle State Historic Site
Putnam County Museum
Circle route around Indianapolis – use state
roads (routes) already there
William Henry Harrison Trail
Ronald Reagan Parkway
White Lick Creek – Morgan Co. North through
Hendricks County and on
Native Tall Grass Area
State Forests to each other
State forest to Major populations
Michigan Road Corridors (original)
Hoosier Heartland Highway
Water trails – Rock Creek, Deer Creek, and
Wildcat Creek
Montgomery County Sugar Creek – Clinton Co.
through Montgomery County to Shades and
Turkey Run Park
Museums (Crawfordsville)
Wabash College
Bloomington, Lake Monroe, Lake Lemon to
Brown County
Tippecanoe State Park to Prophetstown State
Park along Tippecanoe River

Indiana Trails Summit Central West Region Planning Session



South West Region

Corridors (In Ranked Order)

Wabash

I-69

Hoosier Forest

State Road 54

State Road 231

State Road 64

Ohio River

White River

Points of Interest

Milltown

Blue River

English, IN

Perry Co.

Indian Lake, Buzzard Roost, Celina

Lake, Hemlock Cliffs, Tipsaw lake, Ohio River

Marina, Deer Creek, Rock Point

Mt. Vernon

Bristol Myers, G.E. Plant (new project)

Cawleyville

Kimmell Park (Vincennes)

Oubachi

Bone Bank

Wineries - French Lick, Kaufman (Mt. Vernon)

Henderson, KY

Martin Co. – Williams Dam, Spout Springs,

Lawrence Co. – Covered Bridge

Blues Springs,

Fairbanks Land Use

Merum Turtle Creek Reservoir

Sanborn and Elnora

Sullivan

St. Francisville Bridge

Hutsonville

Wabash River

Clarks

Levee System

Agricultural Center

White Oak

Indiana Territory

Red Skeleton

Cypress Pond

Mt. Carmel

Patoka Island

Merum Conference Center

Lawrence County Recreation Park

Wineries

Windy Knoll Vineyard

Winzerwald Winery

Ireland

Oliver

In. Uplands Winery

Rogers and Clark Vineyard

State Hospital (Evansville)

LST / ship

Pigeon Creek

Springs Valley Lake

Lost River

Westey Chapel

Pioneer

Paoli Peaks

State parks

Rivers

Hoosier national forest

Patoka Reservoir

Goose Pond

Shakamak State park

Greene Sullivan

Ohio Scenic Route

Eagle Bluff

Oakland City - lake

Winslow

Forrest Park

Princeton

Toyota

Lynnville

Merom Bluff

Shirley Creek

Wyandot

Merango Cave

Youngs Creek

New Harmony / Hwy 66

American discovery Trail

Wasselman woods

Mesker Zoo

Museums – Evansville

French Lick, West Baden springs

Ferdinand – St Mienards

Jasper

Holiday World

Lincoln State Park

Ohio River state Byways

Mitchell

Spring Mill State Park

Bedford

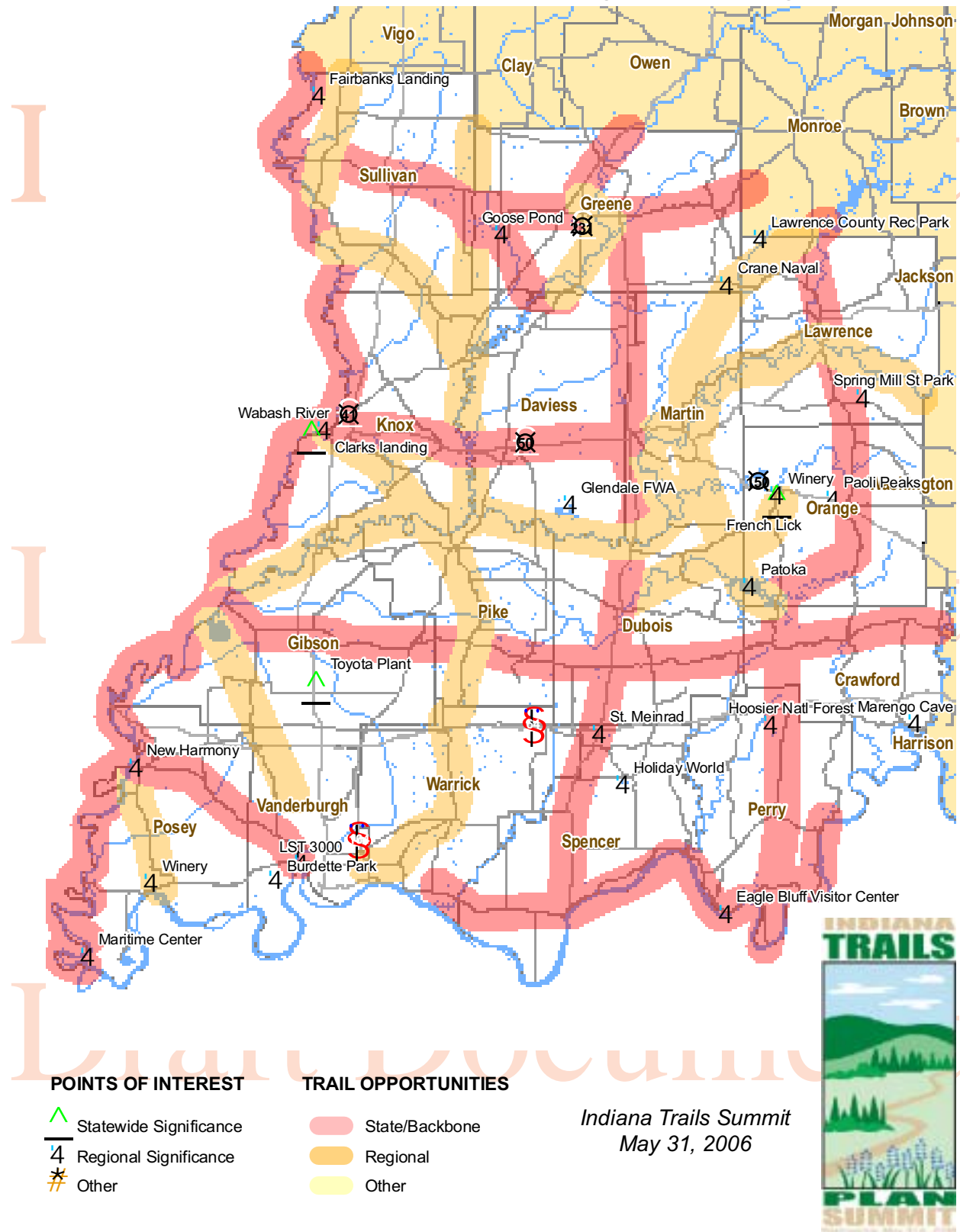
West Bogs Park

Martin County State Forest

Hindostan Falls

Crane

Indiana Trails Summit South West Region Planning Session



Glendale fish and wildlife Area
 Amish country / Montgomery
 Pike State Forest
 Red Bird Riding Area
 Inter lake
 Minnehaha
 Hildebrand
 Dugger
 Abandoned Mine Lands
 Blue Grass Creek
 Sugar Ridge
 Newburgh
 Evansville
 Angel Mounds
 Mt. Vernon
 Burdette Park
 Hovey Lake
 Twin Swamps
 Maritime Center
 USI
 University of Evansville
 Ivy Tech

South East Region

Regional Trails

42 mile Tecumseh Trail, (Brown co. Yellowwood, Martinsville)
 National Boy Scout Hiking Trail
 24 Mile Brookville Reservoir
 Ohio River Greenway
 90 Mile trail, Louisville, Jeffersonville, etc. Scenic byway, S.R. 50,56,156,62 (some trail, some highway)

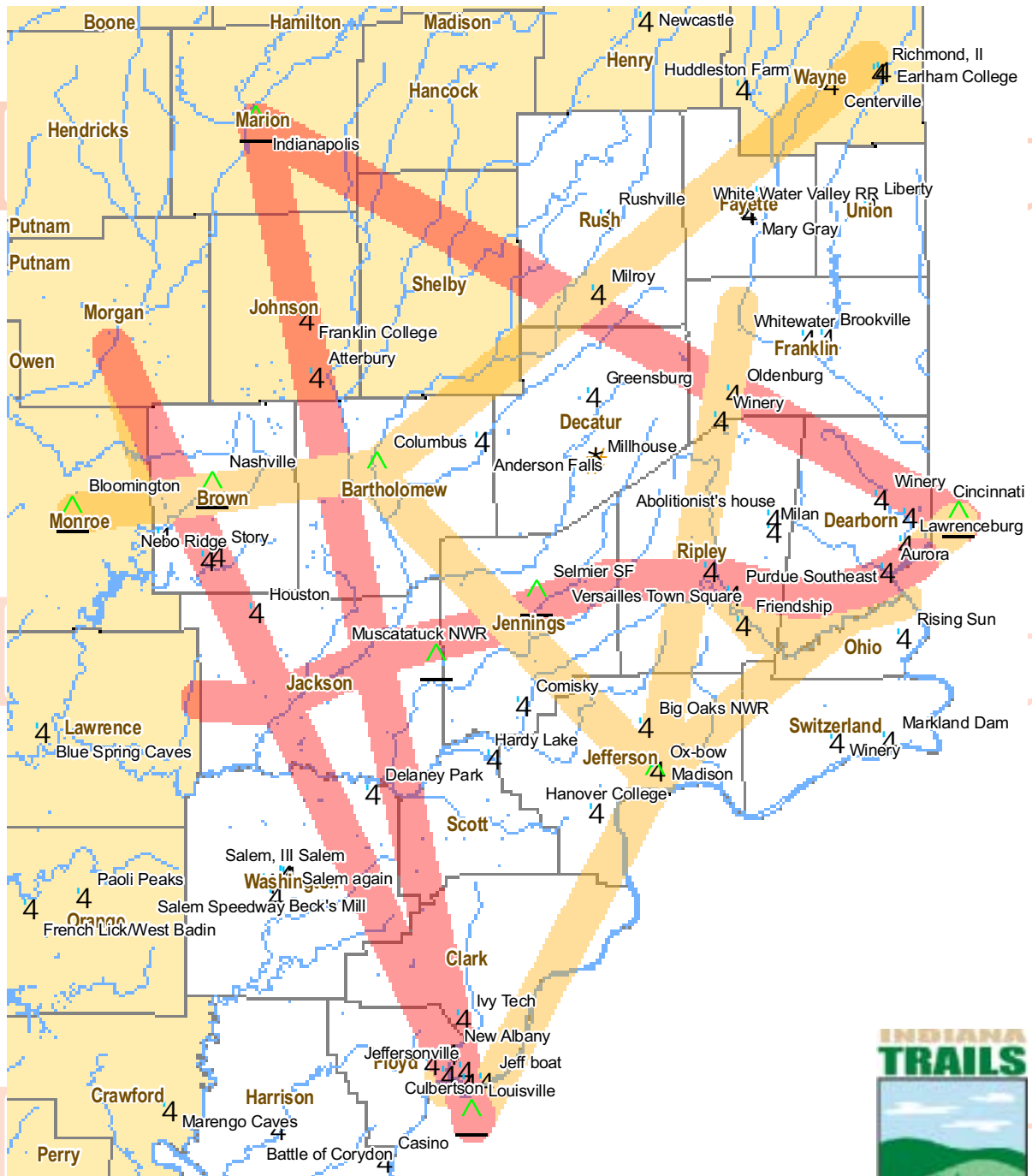
Corridors

Indianapolis – Louisville
 Cincinnati to Indianapolis
 Louisville to Cincinnati
 Louisville to Bloomington, Nashville, Morgan County
 Bloomington to Indianapolis
 Nashville to Columbus to Richmond
 Columbus to Greensburg, New Road, Big bike potential
 Madison to Ripley County to Fort Wayne, Followed 421, (Michigan Road)
 Lawrenceburg to Vincennes along US 50
 Columbus to Madison

Destinations

Brookville Reservoir
 Versailles State Park
 Brown County State Park
 Yellowwood State Forest
 Clifty Falls State Park
 Falls of the Ohio State Park
 HNF
 Hickory Ridge Trail System
 Delaney Park
 Deam Wilderness
 Sparks Ville County Park
 Mary Gray Bird Sanctuary
 Croxley Fish & Wildlife Area
 Marlin Dam
 Ohio River Oxbow – Dearborn Co.
 Columbus (City) Arch
 O'bannon Woods State Park
 Whitewater Canal (Metamora)
 TC Steele Mansion & Historic Site
 Lanier Mansion & Historic Site
 Corydon Mansion & Historic Site
 Whitewater State Park
 Hillforest
 Verasta
 Madison
 Whitewater Mansion & Historic Site
 Culbertson (New Albany) Mansion & Historic Site
 Jeffersonville Historic District
 Aurora (Dearborn Co)
 Friendship (Ripley Co)
 Underground RR Trail
 .Louisville to Indianapolis (points)
 .Tourism project in Barth County
 Anderson Falls (E of Columbus)
 Oldenberg
 Selmeir State Forest
 Nashville, IN
 Salem – John Hay Museum
 Squire Boone Caverns
 Casinos
 –Dearborn
 _Harrison
 _Ohio
 _Switzerland
 Wineries – IN Wine Trail
 (Dearborn Co.)
 _ (Switzerland Co.)
 _ (Jefferson Co.)
 Hope
 Nashville

Indiana Trails Summit South East Region Planning Session



POINTS OF INTEREST

- ▲ Statewide Significance
- 4 Regional Significance
- ★ Other

TRAIL OPPORTUNITIES

- State/Backbone
- Regional
- Other

*Indiana Trails Summit
May 31, 2006*



Hubers Winery, Starlite
Stemler Orchard, Starlite
Town of Brookville
Koetler's FDC
Courthouses
Whitewater Valley RR
Whitewater SP
Storey IN (Brown)
Houston School
Greensburg Courthouse
Muscatatuch NWR
Hardy Lake SRA
Pigeon Roost
Nebo Ridge Trail head
Millhouse
Tecumseh TH
Commisky (Jennings) Streamcliff Farms
Mansion Road (New Albany)
Covered Bridges – (Rush County)
Milroy Amish Community
Vevay
Perfect Slopes (Lawrenceburg)
Vernon, IN
Louisville Attraction
_ Slugger
_ Frazier Arms
_ Various others
Cincinnati Attractions
Becks Mill (Wash. Co.)
Spring Mill SP
French Lick / West Baden >casino
Paoli Peaks
Patzka Res
Camp Atterbury
DNR & Military
Marengo Cave
Colleges - tri/out of region
(Hanover, Franklin IUS, Earlham, IU, IUPUI)
Blue Springs Caverns
Williams Dam
Lewis/Clark departure site
Monroe Reservoir
Loop Island Wetlands
Shipyards (Jeffersonville)
War Memorial – Salem Courthouse
Battle of Corydon Park (Civil War Site)
Monon Museum
Oldest industrial park (Connersville)
Salem Speedway
Versailles Town Square
Big Oaks NWR
Huddleston Farm House, Wayne Co

Draft Document

Draft Document

Draft Document